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Please send results on paper to Dong Jiang in 10D-08 (mail stop CM1-10D19). Thank you very much.

Dong Jiang (78243) 703-305-1345 U.S. Patent and Trademark Office Art Unit 1646 dong.jiang@uspto.gov CM1-10D08 Mail stop: CM1-10D19

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

RESULT 1 AAB15548

Anti-inflammatory; keratolytic; anti-HIV; anti-allergic; antianaemic; antiarteriosclerotic; antiasthmatic; antidiabetic; nephrotropic; cancer; antigout; dermatological; antithyroid; virucide; hepatotropic; antibody; immunosuppressive; cytostatic; fungicide; protozoacide; antibacterial; gene therapy; diagnostic; immunological disorder; viral infection; bacterial infection; fungal infection; parasitic infection; immunogen. Lu DAM; Human immune system molecule from Incyte clone 1890540. Azimzai Y, Baughn MR, AAB15548 standard; Protein; 246 AA 99US-0127852. 99US-0132647. 04-APR-2000; 2000WO-US09072. (first entry) Yue H, Lal P, Tang YT, (INCY-) INCYTE PHARM INC WPI; 2000-665005/64. WO200060080-A2. Homo sapiens 05-APR-1999; 05-MAY-1999; 28-FEB-2001 12-OCT-2000. AAB15548;

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(AAA99775-A95789), and compositions comprising them are useful for the diagnosis, treatment or prevention of immunological disorders, infections and cell proliferative disorders associated with decreased expression or activity of IMOL, such as immunological disorders (e.g. inflammation, actimic keratosis, AIDS, Addison's disease), hamatopoietic cancer, infections caused by virus (e.g. adenovirus, parvovirus, coronavirus), bacteria (e.g. Staphylococcus, Streptococcus, Shigella), fungl (e.g. Aspergillus, Blastomyces), parasites (e.g. plasmodium, Trypanosoma, intestinal protozoa), cell proliferative disorders (e.g. actinic keratosis, arteriosclerosis, bursitis), and cancers (e.g. actinic keratosis, arteriosclerosis, bursitis), and cancers (e.g. leukemia, melanoma, sarcoma). The peptides are also cancers (e.g. leukemia, melanoma, sarcoma). The peptides may be used to detect and quantify gene expression in biopsied tissues in which expression of IMOL may be correlated with the disease, as targets in a carrier and affected individuals, and for screening libraries of carrier and affected individuals, and for screening libraries of carrier and carrier and differences in gene expression in biopsied tissues in which carrier and affected individuals, and for screening libraries of the carrier and affected individuals, and for screening libraries of the carrier and affected individuals, and for screening are approximated.
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                                                                                                                                                                                                                               This sequence represents a human immune system molecule (IMOL) encoded by the cDNA isolated as clone 1890540 from the Incyte BLADTUT07 library. The human IMOLS (AAB15536-B15550) and their encoding polynucleotides
                                             New human immune system molecules 1-15 and polynucleotides encoding them useful for diagnosing, treating or preventing e.g. immunological disorders, infections, cell proliferative disorders, microbial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    compounds in drug screening techniques. Antibodies which specifically bind to IMOL may be used for the diagnosis of disorders characterized by expression of IMOL, or in assays to monitor patients being treated with IMOL or agonists, antagonists, or inhibitors of IMOL.
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The invertion relates to the number Sacrps protein (AASE2580) and to contain a dispersive complement related protein (ACRP30) and contains a collagen-like domain comprising Gly Yaa-Stands The zacrp3 is a homogue collagen-like domain comprising Gly Yaa-Strands. The zacrp3 gene is C-terminal Clq domain comprising Gly Yaa-Strands. The zacrp3 gene is collagen-like domain comprising sacrp3 polypeptides, carp3-specific antibodies, expression constructs and host cells captibodies, expression constructs and host cells comprising zacrp3 nucleic acids, and methods of recombinant production of sacrp3. Human zacrp3, and its agonists and antagonists may be used in the study and modulation of cellular metabolism and energy balance in mammals, and may therefore be used to treat disorders such as obesity and more and conditions associated with these disorders bused to its Clq like domain, zacrp3 and zacrp3-containing fusion proteins may be useful as antimicrobial agents, promoting lysis or phagocytosis of infectious organisms such as bacteria or viruses. Zacrp3, its fragments, fusion proteins, antibodies and activity modulators may also be used to inhibit collagen-induced platelet aggregation, adhesion, or activation, and may therefore have potential for promoting blood flow within the vasculature of a mammal eq., to treat inhiuy to the vasculature or other collagence thuman zacrp3 and its antibodies may additionally be used to study therefore have potential for promoting blood to see the study dimerisation and oligomerisation. The present sequence represents human
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ACRP30; Clq domain; collagen-like domain; energy balance modulation; cellular metabolism; metabolism; anetabolism; anorexia; anorexia; antimicrobial agent; infection; platelet aggregation inhibition; adhesion; activation; vascular injury; antibacterial; antiviral.
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                                                                                                                                                                                                                                        Secreted protein; transmembrane protein; PRO1484; PRO4334; PRO1122; PRO4359; PRO4899; PRO1899; PRO1899; PRO1899; PRO4385; PRO4352; PRO4352; PRO4354; PRO4405; PRO4408; PRO5737; PRO4425; PRO5990; PRO6030; PRO4424; PRO4422; PRO4430; PRO4499; tumour; obesity; diabetes; Insultinenta; kidney disorder; Bergers disease; nephropathy; Schonlein-Henoch purpura; cellac disease; dermatitis herpetiformis; Crohns disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Clq domain protein"
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99US-0125778.
99US-0125826.
99US-0127035.
99US-013706.
99US-0131270.
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51..84
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            241 LLFETK 246
                                       241 LLFETK 246
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21-APR-1999;
27-APR-1999;
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The present sequence represents a secreted or transmembrane polypeptide.
The specification describes polypeptides designated PR0184, PR04334,
PR01252, PR01899, PR01897, PR04186, PR04355, PR04457, PR04405,
PR01352, PR044380, PR04480, PR04480, PR05437, PR04425, PR05990,
PR04356, PR04424, PR04422, PR04430 and PR04499. PR01889 polypeptide is
useful for diagnosing tumour in a mammal. The polypeptides, their
agonists and antagonists are useful treating a condition associated with
expression or activity of the polypeptide. Conditions treated include
obesity, diabetes or hyper-or hypo-insulinemia. The polypeptides are
obesity, diabetes or hyper-or hypo-insulinemia. The polypeptides are
capable of inducing proliferation of mammalian kidney mesangial cells
and are therefore useful for treating kidney disorders associated with
decreased mesangial cell function such as Bergers disease or other
comphropathies associated with Schonlein-Henoch purpura, cellac disease,
dermatitis herpetiformis or Crohns disease. The nucleic acids may be used
to generate transgenic animals for use in development and screening of
therapeutically useful reagents and also for chromosome identification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel secreted and transmembrane polypeptides useful for diagnosing tumour in a mammal, for identifying agonists and antagonists of the polypeptide and for therapeutic use
                                                                                                                                                                                                                                                                                                                                                                            Pan
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Zhang Z;
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100.0%; Pred. No. 2e-124;
1ve 0; Mismatches 0
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990S-0131272.
990S-0131291.
990S-0132371.
990S-0132379.
                                                                                                                                       990S-0135750
990S-0138166.
990S-0144791.
990S-0146970.
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                                                                                                                                                                                                                                                                                                                 (GETH ) GENENTECH INC
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||LFETK 246
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                                                                                                                                          25-MAY-1999;
08-JUN-1999;
20-JUL-1999;
                                                          04-MAY-1999;
04-MAY-1999;
04-MAY-1999;
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09-DEC-1999;
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241 LLFETK 246

YLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGF

MASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYV 180

121 121 181

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This invention relates to nucleic acid sequences AAF93744 - AAF93916
which encode human secretory or membrane proteins represented by
AAB88131. - AAB8819. Included in the invention are primers
AAF93917 - AAF94295 and AAF62232 - AAF62235 which are used to isolate the
CDNA sequences of the invention. The invention also includes methods for
the production of antibodies directed against the proteins, and cDNA
sequences, which can be used in vaccines. The polynucleotide sequences
can be used in gene therapy. The polynucleotide sequences
can be used in gene therapy. The polynucleotide sequences
can be used in gene therapy. The polynucleotide sequences
can be used any be used in vaccines. The protein treatment and
diagnosis of diseases associated with inappropriate secretory
protein/membrane protein expression. The nucleic acids and complementary
sequences may also be used as DNA probes in diagnostic assays
(e.g. polymerase chain reactions (PCR) to detect and quantitate the
presence of similar nucleic acid sequences in samples. They may also be
used to study the expression and function of secretory proteins/membrane
cused to study the expression and function of secretory proteins/membrane
colypeptides and their role in metabolism. The polypeptides and
antigens in the production of antagonists them and in assays to
identify medulators (agonists and antagonists) of expression and
activity. The antibodies and antagonists may also be used as therapean.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful in
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                                                                                                                                                                      Human; secretory protein; membrane protein; vaccine; gene therapy; rheumatoid arthritis; diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hayashi K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acids encoding secretory proteins/membrane proteins, usefu
gene therapy or as candidate target molecules in drug development
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Pred. No. 2e-124;
0; Mismatches 0; Indels
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                                                                                            Human membrane or secretory protein clone PSEC0232.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ota T, Isogai T, Nishikawa T,
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Best Local Similarity 100.0%;
Matches 246; Conservative 0;
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11-JAN-2000; 2000JP-0118775.
02-MAY-2000; 2000JP-0183766.
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23-MAY-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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Human; secreted protein; membrane-associated protein; hypertension; inflammatory disorder; neurological disorder; haematopoietic disorder; skeletal developmental disorder; growth abnormality; autoimmune disorder; neurodegenerative disorder; nervous system disorder; bacterial infection; peripheral myelinopathy; viral infection; cancer; obesity; diabetes; hypotension; sexual development disorder; blood disorder.

12-JUL-2000; 2000US-218033P. 21-AUG-2000; 2000US-226517P. 12-JUL-2001; 2001WO-US21985.

WO200204600-A2.

17-JAN-2002

Novel human secreted or membrane-associated protein #10.

(first entry)

08-MAY-2002

AAU84371;

AAU84371 standard; Protein; 246 AA.

RESULT 5

AAU8437.

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The present invention relates to the isolation of novel human secreted or membrane-associated proteins and the genes encoding them. The sequences of the invention are useful for treating, preventing and emeliorating various diseases such as inflammatory disorders (e.g. asthma), neurological disorders (e.g. dementia), haematopoietic disorders, skeletal developmental disorders, growth abnormalities, disorders, autoimmune disorders (e.g. Huntington's disease), nervous system disorders, autoimmune disorders (e.g. Huntington's disease), nervous system disorders, autoimmune disorders; malignant tumours, hyper- and hypotension, obesity, bulimia, anorexia, manic depression, delirium, mental retardation, Tourette's syndrome, schizophrenia, growth, mental or sexual development disorders, and dysfunctions of the blood cascade system including those leading to stroke. AAU84362-AAU84389 represent the novel human secreted or membrane-associated proteins of the
                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel secreted and membrane-associated polypeptides and polynucleotides encoding the polypeptides, for preventing, treating and ameliorating cancers, mental or sexual developmental disorders, and malignant tumours
                                                                                                                                                                                  Strum JC;
                                                                                                                                                                                  Rizvi SK,
                                                                                                                                                                              Lai Y, Martensen SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 131-132; 151pp; English.
(SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC. (GLAX ) GLAXO GROUP LTD.
                                                                                                                                                                              Cogswell JP, La
Kiang Z, Xie Q;
                                                                                                                                                                                                                            Smith RF, Xiang Z,
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19-APR-2000; 2000WO-US10454
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                                                                                                                                                                                                          Matches 246;
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                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                   Human; secreted protein; membrane-associated protein; hypertension; inflammatory disorder; neurological disorder; haematopoietic disorder; skeletal developmental disorder; growth abnormality; autoimmune disorder; neurodegenerative disorder; nervous system disorder; bacterial infection; peripheral myelinopathy; viral infection; cancer; obesity; diabetes; hypotension; sexual development disorder; blood disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                secreted and membrane-associated polypeptides and polynucleotides ing the polypeptides, for preventing, treating and ameliorating rs, mental or sexual developmental disorders, and malignant tumours
                                                                                                                                                                                                  61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
                                                                                                                                                  121 MASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYV 180
                                                                                                                                                            181 YLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGF 240
                                                                                                              61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strum JC;
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                                                                         1 MLWRQLIYWQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SK,
                                      Length
                                                        Indels
                                                                                                                                                                                                                                                                                                                                                  Novel human secreted or membrane-associated protein #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rizvi
                                      23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Martensen SA,
                                     Score 1367; DB 2
Pred. No. 2e-124;
                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 130-131; 151pp; English
                                                                                                                                                                                                                                                                                           AAU84370 standard; Protein; 319 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lai Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC. (GLAX ) GLAXO GROUP LTD.
                                                       ;
;
                                   100.0%;
                                             100.08;
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21-AUG-2000; 2000US-226517P.
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                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cogswell JP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Xiang 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-188468/24.
N-PSDB; ABK35590.
                                              Local Similarity
                  246 AA;
                                                                                                                                                                                                                           LLFETK 246
                                                                                                                                                                                                                                      |||||||
|LLFETK 246
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                08-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JAN-2002
                                                       246;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Smith RF,
                                                                                                                                                                                                                                                                                                             AAU84370;
                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cancers,
                                    Query Match
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                                                       Matches
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or membrane-associated proteins and the genes encoding them. The sequences of the invention are useful for treating, preventing and ameliorating various diseases such as inflammatory disorders (e.g. ameliorating various diseases such as inflammatory disorders (e.g. ameliorating various disorders (e.g. dementia), haematopoletic disorders, skeletal developmental disorders, growth abnormalities, neurological disorders (e.g. Huntington's disease), nervous system disorders, autoimmune disorders (e.g. rheumatoid arthritis), peripheral myelinopathies, viral and bacterial infections, alpharamnosidosis, diabetes, cancers, malignant tumours, hyper- and hypotension, obesity, bulimia, anorexia, manic depression, delirium, mental retardation, Tourette's syndrome, schizophrenia, growth, mental cristal development disorders, and dysfunctions of the blood cascade system including those leading to stroke. Anu84362-Anu84389 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;;
present invention relates to the isolation of novel human secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse zacrp2; adipocyte complement related protein homologue;
ACRP30; C1q domain; collagen-11ke domain; energy balance modulation;
cellular metabolism; metabolism; metabolism; anorexial
antimicrobial agent; infection; platelet aggregation inhibition;
adhesion; activation; vascular injury; antibacterial; antiviral;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SHPKTGTVDNNTSTDLKSLRPDELPHPEVDDLAQITTFWGQSPQTGGLPPDCSKCCHGDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SFRGYQGPPGPPGPPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GYPGIPPELQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29 -----SPQTGGLPPDCSKCHGDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 23; Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1320.5; DB 2:
Pred. No. 9.3e-120;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MLWRQLIYWQLLALFFLPFCLCQDEYME---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB29582 standard; Protein; 246 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse zacrp2 protein, SEQ ID NO:12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96.68;
77.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HGDHQRFSTFAGFLLFETK 246
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   319 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200063377-A1.
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07-JAN-2002 (first entry)
uncleic acids which encode it (AACR4058, AAC84058). Zacrp3 is a homogue of adipocyte complement related protein (ACRP30) and contains a homogue of adipocyte complement related protein (ACRP30) and contains a homogue collapsen-like domain comprising Gly Yaa-Yaa or Gly Yaa-Pro repeats, and a C-terminal Clq domain comprising Gly Yaa-Stands. The zacrp3 gene is created on chromosome 5pl2. The invention also relates to zacrp3 gene is fragments, fusion proteins containing zacrp3 polypeptides.

I comprising zacrp3 nucleic acids, and methods of recombinant production of zacrp3. Human zacrp3, and its agonists and antagonists may be used in the study and modulation of cellular metabolism and energy balance in mammals, and may therefore be used to treat disorders such as obesity and anorexia, and conditions associated with these disorders. Due to its Clq is an encompassion of cellular metabolism and sorders. Due to its Clq is an entimicrobial agents, promoting lysis or phagocytosis of infectious or granisms such as bacteria or viruses. Zacrp3, its fragments, fusion contains, and may homes and activity modulators may a server or anorexia, and may homes and activity modulators may a server or anorexia or proteins, and properties and activity modulators may a server or anorexia or proteins, and may homes and activity modulators may a server or anorexia or activity modulators may activation and may homes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of a mammal e.g., to treat injury to the vasculature or other collagenous tissue. Human zacrp3 and its antibodies may additionally be used to study dimerisation and oligomerisation. The present sequence represents mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          collagen-induced platelet aggregation, adhesion, or activation, and may
therefore have potential for promoting blood flow within the vasculature
                                                                                                                                             Novel zacrp3 polypeptides used to treat or prevent bacterial or viral infections, for wound healing, improving blood flow, and to analyze energy efficiency in mammals -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYGEKGYPGVPPELQIAF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 YLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGF 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 PPGIPGNHGNNGANGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MLWRQLIYWQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPG 60
                                                                                                                                                                                                                                  The invention relates to the human zacrp3 protein (AAB29580) and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Mismatches
                                                                                                                                                                                                        Disclosure; Page 117-118; 123pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 zacrp2, a homologue of human zacrp3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAM99925 standard; Protein; 225 AA.
             99US-0294943.
                                                                      ddington CS, Bishop PD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                           (ZYMO ) ZYMOGENETICS INC
                                                                                                  WPI; 2000-665243/64.
N-PSDB; AAC64064.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                246 AA;
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            20-APR-1999;
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les 236;
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Matches
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ID AAM
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antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic; cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
                                             Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
                                                                                                                                      neurological disease; infection; human; secreted protein.
Human polypeptide SEQ ID NO 41.
                                                                                                                                                                                                                                                                                                                       17-JAN-2001; 2001WO-US01356
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                                                                                                                                                                                   Homo sapiens.
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06-SEP-2000;
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14-SEP-2000;
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2000US-0251030.
2000US-0251988.
2000US-0256719.
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2000US-0234274.
2000US-0234997.
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2000US-0241785,
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05-DEC-2000;
05-DEC-2000;
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25.SEP-2000;
25.SEP-2000;
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27.SEP-2000;
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29.SEP-2000;
20.CCT-2000;
02.CCT-2000;
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02.CCT-2000;
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03.CCT-2000;
03.CC
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20-0CT-2000;
20-0CT-2000;
20-0CT-2000;
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- NOV - 2000;
- NOV - 2000;
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17-NOV-2000;
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The invention relates to novel human polynucleotides (AA199513-AA199538)

and the encoded proteins (AAM99915-AAM99934) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (art)agonists are useful in the dispnosis, treatment and prevention of and (art)agonists are useful in the dispnosis, treatment and prevention of and (art)agonists are useful in the dispnosis, treatment and prevention of a cancer, e.g. breast and ovarian cancer and other cancers of the afternal gland, bone, bone marrow, breast, gastrointestinal tract, liver, allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, crohn's disease, multiple sclerosis, rheumatoid architective and ulcerative collitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases c.g. cerebral anoxia and epilepsy; and (f) infectious diseases such as viral, bacterial, fungal and parasitic infections diseases such as viral, bacterial, fungal and parasitic infections.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp. wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                          o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNH 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DKGDLGPRGERGQHGPKGEKGYPGIPPELQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FDVMTGREGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNH 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28 ESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGANGATGHEGAKGEKG 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acids and polypeptides, useful for treating, preventing ameliorating human disorders and diseases \,^{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88.4%; Score 1208; DB 22; Length 225; 99.5%; Pred. No. 4.9e-109; ive 1; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                Claim 11; SEQ ID NO 41; 465pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGFLLFETK 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human polypeptide SEQ ID NO 6791.
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                                                                                                                                                                                                                Rosen CA, Barash SC, Ruben SM;
06-DEC-2000; 2000US-0251479.

08-DEC-2000; 2000US-0251856.

08-DEC-2000; 2000US-0251868.

08-DEC-2000; 2000US-0251869.

08-DEC-2000; 2000US-0251999.

11-DEC-2000; 2000US-0251990.
                                                                                                                                                                        (HUMA-) HUMAN GENOME SCI INC
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Best Local Similarity 99.5<sup>1</sup>
Matches 218; Conservative
                                                                                                                                                                                                                                                WPI; 2001-451924/48.
N-PSDB; AAI99523.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     225 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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AAM41860
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Note: The sequence data for this patent did not form part of the printed specification.
 nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                             Wang D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -- 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 ILLPQPLEXLGLQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; hautington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel nucleic acids and polypeptides, useful for treating disorders such as central nervous system injuries -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      32;
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Yang Y,
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Pred. No. 1.2e-77;
0; Mismatches 0;
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Ku C, Xue AJ,
Drmanac RT;
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                                                                                                                                                                                                                                                                                                                                                                                                            Chen R,
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Wang Z, Wehrman T, X
Zhou P, Goodrich R,
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84.28;
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2000US-0552317
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Matches 170; Conservative
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                                                                                                                                                                                                                                                                                                                                                                             (HYSE-) HYSEQ INC.
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                                                                                                                                        WO200153312-A1.
                                                                                                            Homo sapiens.
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19-JUL-2000;
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                                                                             Leukaemia
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Zhao QA,
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The practice squares is named process.

HP10781. The polynucleotide appreptide of the invention can be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide, by inserting the nucleic acids may be used to produce the polypeptide, by inserting the nucleic acids into a host cell and culturing the cell to express the protein. The polynucleotides and its complementary sequences may also be used as DNA probes in diagnostic assays and also used in gene therapy. The probes in diagnostic assays and also used in gene therapy. The probes may also be used as antigens in the production of antibodies and in assays to identify medulators of polypeptide expression and activity. The polypeptides and nucleic acids may be used as nutritional crivity. The polypeptides and nucleic acids may be used as nutritional supplements, to medulate cytokine and cell proliferation activity, to modulate immune stimulation or suppression (e.g. for the treatment of microbial infections and autoimmune disorders such as multiple sclerosis, rheumatopicasis, to medulate tissue growth activity (e.g. for the treatment of Parkinson's disease, Huntington's disease and Alzheimer's fertility), to modulate chemotactic and chemokinetic activity, to modulate receptor modulate thrombolytic activity, to modulate receptor ilgand activity, to modulate inflammation and to inhibit tumour growth.
                                                                                                                                                                                                                                                                                                                                  cell proliferation; immunomodulatory; autoimmune disorder; antimicrobial; multiple sclerosis; rheumatoid arthritis; insulin-dependent diabetes; haematopoiesis; tissue growth activity; Parkinson's disease; otherwise; Huntington's disease; Alzheimer's disease; chemotactic; chemokinetic; haemostatic; thrombolytic; tumour growth inhibitor; anabolic; contraceptive; antiinfertility; antiinflammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human proteins with hydrophobic domains and the nucleic acids encoding them, useful for preventing diagnosing and treating e.g. cancer, Alzheimer's and inflammation -
                                                                                                                                                                                                                                                                                                                   hydrophobic domain; gene therapy; nutritional supplement;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        present sequence is human protein with hydrophobic domain,
                                                                                                                                                                                                                                                                           Human protein having hydrophobic domain, HP10781.
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                                                                                                                                             AAE06589 standard; Protein; 223
225 GALHGDHQRFSTFAGFLLFETK 246
                     181 GALHGDHQRFSTFAGFLLFETK 202
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(SAGA ) SAGAMI CHEM RES CENT.
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2000JP-0026862
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                                                                                                                                                                                                                                  (first entry)
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Similarity
                                                                               128 AA;
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                                                                                                                                                                                                                           MASL 124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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09-JUL-2000;
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14-SEP-2000;
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                                                                                                                Best Local Sım
Matches 124;
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                                                                                 Sequence
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                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human secreted proteins, and encode the proteins given in AAY11374 to hax11371, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, call proliferation/differentiation activity, hemmatopoiesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity, chemotactic/ chemokinetic activity, haemostatic and
                                                                                                                                                                                                                                                                                                                                        Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; hacmatopolesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; hacmatori; thrombolytic; anti-inflammatory; tumour inhibition.
                                                                                                                                                     61 SHPKTGTVDNNTSTDLKSLRPDELPHPEVDDLAQITTFWGQSPQTGGLPPDCSKCCHGDY 120
                                                                                                                                           SFRGYQGPPGPPGPPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acids encoding human secreted · proteins obtained from cDNA libraries prepared from substantia nigra, cerebellum, surrenals and fetal brain tissue
                                        Gaps
                                                                                                   47
                                                                               9
                                                                       -- SPQTGGLPPDCSKCCHGDY
                                        73;
                   Length 223;
                                        Indels
                    DB 22;
                                                                                                                                                                                             GYPGIPPELQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
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                               le-68;
                                                                                                                                                                                                                                                                                                                      Human 5' EST secreted protein SEQ ID No 307.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lacroix
                                       0; Mismatches
                    Score 792.5;
                                                            1 MIWROLIYWOLLALFFLPFCLCQDEYME-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 34; Page 402-403; 434pp; English.
                              Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Duclert A, Dumas Milne Edwards J,
                                                                                                                                                                                                                                                         AAY11485 standard; Protein; 128 AA
                  58.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98WO-IB01235
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                                                                                                                                                                                                                                                                                                 (first entry)
                                       Conservative
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                              Similarity
223 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JUL-1998;
                                                                                                                                                                                                                                                                                                 21-JUN-1999
                              Best Local Simi
Matches 147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-FEB-1999
                                                                                                                                                                                                                                                                              AAY11485;
 Sequence
                   Query Match
                                                                                                   53
                                                                                                                                           48
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                                                                                                                                                                                                                                      RESULT 11
                                                                                                                                                                                                                                                 AAY11485
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thrombolytic activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity or other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peripheral nervous system; neuropathy; central nervous system; CNS; Alzhehaer's; Parkinson's disease; heambotatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel nucleic acids and polypeptides, useful for treating disorders such as central nervous system injuries
                                                                                                                                                                                                                                                                                                                                                                                1 MLWRQLIYWQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPG
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                                                                                                                                                                                                                                                     Length 128;
                                                                                                                                                                                                                                                                                                       Indels
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Yang Y,
                                                                                                                                                                                                                                                   Score 721; DB 20;
Pred. No. 4.2e-62;
0; Mismatches 0;
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u C, Xue AJ,
Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chen R,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAM40074 standard; Protein; 126 AA
                                                                                                                                                                                                                                52.7%; Scu-
100.0%; Prev
0; F
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Wang Z, Wehrman T, X
Zhou P, Goodrich R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-048B725.
2000US-0552317.
2000US-0598042.
2000US-0620312.
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2000US-0662191.
2000US-0693036.
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                                                                 The invention relates to human nucleic acids (AAIS7798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous system diseases, such as localised neuropathies and central nervous system diseases, such as lateral sclerosis, and Shy-Drager Syndrome. Other uses include the lattilastion of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murison JG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 MASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYV 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast; embryonic skin cell; keratinocyte stem cell; transit amplifying cell; secreted; transmembrane; inflammation; cancer; neurological disease; anglogenesis; tumour vascularisation; growth disorder; developmental disorder; kin wound; hair follicle disorder; anti-inflammatory; cytostatic; neuroprotective; vulnery.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel polynucleotides useful for the treatment of various conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 YLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHORFSTFAGF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48.5%; Score 663; DB 22; Length 126; 100.0%; Pred. No. 1.8e-56; Live 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Onrust R,
Example 5; SEQ ID NO 3219; 10078pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Watson JD,
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98US-0188930
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C.N.S disorders.
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||EFETK 126
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09-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
AAY75969
    \overset{\mathsf{A}}{\times}\overset{\mathsf{A}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overset{\mathsf{C}}{\vee}\overs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                                                                                                                              The invention relates to novel nucleic acid sequences derived from rat dermal papilla, human keratinocytes and neonatal foreskin fibroblasts, and mouse embryonic skin, keratinocyte stem cells and transit amplifying cells. Polypeptides of the invention may be used to treat inflammation, cancer and neurological diseases. The proteins may be used to stimulate the growth and motility of keratinocytes, to inhibit the growth of cancer cells, to modulate angiogenesis and tumour vascularisation, to modulate skin inflammation, to modulate epithelial cell growth and to inhibit binding of HIV-1 to leukocytes. The invention may also be used to treat growth and developmental defects, skin wounds and hair follicle disorders. Sequences derived from several mouse, rat or human skin cell types. Sequences AAY75942-Y75123 represent polypeptides encoded by cDNA sequences AAY75942-Y7513 rapresent or human skin cell types. Sequences AAY75942-Y75947, AAY76020-Y76021, AAY76094-Y76104 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murison JG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Skin; dermal papilla; keratinocyte; neonatal foreskin fibroblast; embryonic skin cell; keratinocyte stem cell; transit amplifying cell; secreted; transmembrane; inflammation; cancer; neurological disease; anglogenesis; tumour vascularisation; growth disorder; developmental disorder; kin wound; hair follicle disorder; anti-inflammatory; cytostatic; neuroprotective; vulnery.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY76119 are proteins with an N-terminal signal sequence, indicating that they are secreted. Sequences AAY75986-Y75989, AAY76061-Y76071, AAY76106-Y76109 and AAY76121-Y76122 are proteins with one or more
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel polynucleotides useful for the treatment of various conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MLWRQLIYWQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKG 105
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 582; DB 2:
Pred. No. 1e-48;
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                                                                  Claim 4; Page 112-113; 235pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY76025 standard; Protein; 105 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       putative transmembrane domains.
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93.38;
including wounds and cancer
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Best Local Similarity 93.33
Matches 98; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   105 AA;
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dermal papilla, human keratinocytes and meonatal foreskin fibroblasts, and mouse embryonic skin, keratinocytes stem cells and transit amplifying cells. Polypeptides of the invention may be used to traat inflammation, cancer and neurological diseases. The proteins may be used to stimulate the growth and motility of keratinocytes, to inhibit the growth of cancer cells, to modulate anglogenesis and tumour vascularisation, to modulate skin inflammation, to modulate skin inflammation, to modulate skin wonth and developmental defects. The invention may also be used inhibit binding of HIV-1 to leukocytes. The invention may also be used to treat growth and developmental defects, skin wounds and hair follicle disorders. Sequences AAY75942-Y7613 represent polypeptides encoded by cDNA sequences AAY75942-Y7613 represent polypeptides encoded to that they are secreted. Sequences AAY75947, AAY76020-Y7601, AAY7601, AAY7601,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated polynucleotide used in the identification of genetic disorders and encoding polypeptides used for treating inflammatory disease, cancer and neurological diseases -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nootropic; neuroprotective; vulnerary; immunomodulatory; vaccine; keratinocyte growth stimulation; cancer; anglogenesis inhibition; inflammation; neurological disease.
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                                                                                           novel nucleic acid sequences derived
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sleeman M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 582; DB 21
Pred. No. 1e-48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Mismatches
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                                            Claim 4; Page 168; 235pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           putative transmembrane domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         42.68;
including wounds and cancer
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N-PSDB; AAC99566, AAC99776.
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                                                                                           The invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        105 AA;
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                              The present sequence is a polypeptide which is expressed in mammalian skin cells. The polypeptide is useful for stimulating keratinocyte growth and motility, inhibiting the growth of cancer cells, modulating angiogenesis, inhibiting angiogenesis and vascularisation of tumours, modulating skin inflammation, stimulating the growth of epithelial cells, inhibiting the binding of human immunodeficiency virus (HIV)-1 to leukocytes, and treating inflammatory disease, cancer and neurological diseases. The polynucleotide can be used as a marker, in the identification of genetic disorders, and for the design of
                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                                                              Length 105;
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Pred. No. 1e-48;
2; Mismatches 5; Indels
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                                                                                                                                                                                                                oligonucleotides for examining expression patterns.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       completed: January 13, 2003, 10:42:49
Claim 4; Page 147; 352pp; English.
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Best Local Similarity 93.39
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1 MLWRQLIYWQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPG 60
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Sequence 147, Application US/09188930A

GENERAL INCORMATION:
APPLICANT: Watson, James D.
APPLICANT: Strachan, Lorna
APPLICANT: Steeman, Matthew
APPLICANT: Orlean, Matthew
APPLICANT: Orlean, James Greg
TITLE OF INVEWTION: Compositions Isolated From Skin Cells
TITLE OF INVEWTION: and Methods For Their Use
FILE REFERENCE: 11000-1011c1
CURRENT APPLICATION NUMBER: US/09/188,930A
CURRENT FILING DATE: 1998-11-09
NUMBER OF SEQ ID NOS: 348
SOFTWARE: FastSEQ for Windows Version 3.0
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Patent No. 6150502
GENERAL INFORMATION:
APPLICANT: Strachan, Lorna
APPLICANT: Stleeman, Matthew
APPLICANT: OSTEOMIN, Matthew
APPLICANT: OSTEOMIN, Matthew
TITLE OF INVENTION: Compositions Isolated From Skin Cells
TITLE OF INVENTION: and Methods For Their Use
TITLE OF INVENTION: and Methods For Their Use
TITLE OF INVENTION: Use
CURRENT APPLICATION NUMBER: US/09/188,930A
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                  US-09-140-804-5

US-09-140-804-5

US-09-140-804-7

US-08-629-348-3

US-09-029-348-3

US-09-029-348-2

US-09-140-804-6

US-09-140-804-6

US-08-478-028-3

US-08-555-33

US-08-555-659-12

US-08-555-669-12

US-08-973-663-12

US-08-974-168-9

US-08-294-206-7
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93.38;
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Best Local Similarity 93.3
Matches 98; Conservative
  RESULT 2
US-09-188-930-280
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LENGTH: 105
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Appli
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482.536 Million cell updates/sec
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                                                                                                                                                                    January 13, 2003, 10:42:48; Search time 15 Seconds
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/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
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/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/RCTUS_COMB.pep:*
/cgn2_6/ptodata/1/laa/RCTUS_COMB.pep:*
                         GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd
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Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93 GPRGER------GQHGPKGEKGYPGIP-----PELQIAFMASLATHFSNQNS 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |||| ||: | | | | | :| |:||:||
55 GPPGAPGSSGMVGRMGFPGKDGQDGQDGDGEEGPPGRTGNRGKQGPKGKAGAIGRA 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               191 SMYSYEMK-GKSDTSSNHAVLKLAKGDEVWLRM----GNGALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Watson, James D.
APPLICANT: Strachan, Lorna
APPLICANT: Strachan, Lorna
APPLICANT: Steeman, Matthew
APPLICANT: Onrust, Rene
APPLICANT: Murison, James Greg
TITLE OF INVENTION: Compositions Isolated From Skin Cells
TITLE OF INVENTION: COMPOSITIONS FOR Their Use
FILE REFERENCE: 11000.1011c1
CURRENT APPLICATION NUMBER: US/09/188,930A
CURRENT FILING DATE: 1998-11-09
NUMBER OF SEQ ID NOS: 348
SOTTWARE: FASTSEQ for Windows Version 3.0
                                                                                                                                                            Length 105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89; Indels
                                                                                                                                                                                                                                                                                                                     61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKG 105
                                                                                                                                                        Score 582; DB 4; I
Pred. No. 2.1e-51;
2; Mismatches 5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41; Mismatches
              NUMBER OF SEQ ID NOS: 348
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 294, Application US/09188930A Patent No. 6150502 GENERAL INFORMATION:
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CURRENT FILING DATE: 1998-11-09
                                                                                                                                                        42.6%;
L Similarity 93.3%;
98; Conservative
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Best Local Similarity
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Best Local Similarity
                                                                                  ; TYPE: PRT
; ORGANISM: Rat
US-09-188-930-280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Rat
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                                                 SEQ ID NO 280
LENGTH: 105
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US-08-463-911-2
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64 IPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGER---GQHGPKGEKGYPGIPPE---- 115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 171 KHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG---A 226
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 LLLQALLFLLILP-SHAEDDVTTTEELAPALVPPPKGTCA-----GWMA-----GIPG 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/09530423
Patent No. 6461821
GENERAL INFORMATION:
APPLICANT: Otsuka Pharmaceutical Co., Ltd.
APPLICANT: Otsuka Pharmaceutical Co., Ltd.
TITLE OF INVENTION: Smooth muscle growth inhibitory composition, a
TITLE OF INVENTION: diagnostic method for arteriosclerosis and a kit
TITLE OF INVENTION: therefor
FILE REFERENCE: P98-51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                    Brook, Smith & Reynolds, P.C.
                 APPLICANT: Scherer, Philipp E.
APPLICANT: Lodish, Harvey F.
TITLE OF INVENTION: A NOVEL SERUM PROTEIN PRODUCED TITLE OF INVENTION: EXCLUSIVELY IN ADIPOCYTES
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21.5%; Score 294; DB 2; L
31.5%; Pred. No. 7.4e-22;
tive 40; Mismatches 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGIENATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: WH195-05
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 861-6240
INFORMATION FOR SEQ. ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/463,911
                                                                                                                                                                                             Two Militia Drive
                                                                                                                                                                                                                                                                                                                                        Floppy disk
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Best Local Similarity 31.5%
Matches 81; Conservative
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CITY: Lexington
STATE: Massachusetts
                                                                                                                                                                      Hamilton,
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MOLECULE TYPE: protein
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
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US-09-530-423-2
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APPLICANT: Leiby, K.
APPLICANT: MCRAY, C.
APPLICANT: BOSSON: S.
TITLE OF INVENTION: SECRETED PROTEINS AND USES THEREOF
                           21.5%; Score 293.5; DB 2; 34.5%; Pred. No. 8.2e-22; tive 35; Mismatches 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 20, Application US/09336536 ; Patent No. 6406884
                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 3, Application US/09140804; Patent No. 6197930
                           Query Match
21.5%
Best Local Similarity 34.5%
Matches 76; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORGANISM: Homo saplens US-09-140-804-3
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Matches 76; Conserv
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                           53 QGP----PGPPGP-----PGIPGNHGNNGNNGATGHEGAKGEKGDKGD---LGPR---GE 97
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APPLICANT: Lodish, Harvey F.
TITLE OF INVENTION: A NOVEL SERUM PROTEIN PRODUCED
TITLE OF INVENTION: BXCLUSIVELY IN ADIPOCYTES
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS: Brook, Smith & Reynolds, P.C.
STREET: TWO MIlitia Drive
                                                                                                                                                                                                                    DB 4;
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SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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                                                                                                                                           ; TYPE: PRT
; ORGANISM: Abdominal fat tissue from myoma uteri
US-09-530-423-2
CURRENT APPLICATION NUMBER: US/09/530,423
CURRENT FILING DATE: 2000-05-01
PRIOR APPLICATION NUMBER: JP H9-297569
PRIOR FILING DATE: 1997-10-29
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: WH195-05
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 861-6240
TELEPKX: (617) 861-6240
TELEFXX: (617) 861-6340
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/463,911
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Patent No. 5869330
GENERAL INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-
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STATE: Massachusetts
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; MOLECULE TYPE: protein
US-08-463-911-7
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                                                                                                        SEQ ID NO 2
LENGTH: 231
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US-08-463-911-7
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                                                                                                                                            23 QGPGVLLPLPKGACTGWMAGIPGHPGHNGAPGRDGRDGTPGEKGEKGDPGLIGPKGDIGE 82
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Length 244;
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APPLICANT: Sheppard, Paul O.
APPLICANT: Humes, Jacqueline M.
TITLE OF INFUNION: ADIPOCYTE-SPECIFIC PROTEIN HOMOLOGS
FILE REFERENCE: 97-49
CURRENT PAPLICATION NUMBER: US/09/140,804
CURRENT FILING DATE: 1998-08-26
EARLIER APPLICATION NUMBER: 60/056,983
EARLIER FILING DATE: 1997-08-26
NUMBER OF SEQ ID NOS: 47
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                            208 AVLKLAKGDEVWLRM-GNG---ALHGDHQRFSTFAGFLLF 243
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dlarity 34.5%; Pred. No. 8.2e-22;
Conservative 35; Mismatches 78;
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6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYQGPPGPPGPPG 63
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LENGTH: 247
                                   RESULT 10
US-09-140-804-8
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TYPE: PRT
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CURRENT APPLICATION NUMBER: US/09/530, 423
CURRENT FILING DATE: 2000-05-01
PRIOR FILING DATE: 1997-10-29
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                Score 293.5; DB 4;
Pred. No. 8.2e-22;
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US-09-530-423-1
                                                                                                                                                                                                                           35; Mismatches
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Patent No. 6461821
GENERAL INFORMATION:
APPLICANT: Otsuka Pharmaceutical Co., Ltd.
FILE REFERENCE: 7853-144
CURRENT APPLICATION NUMBER: US/09/336,536
CURRENT FILING DATE: 1999-06-18
NUMBER OF SEQ ID NOS: 75
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 244
                                                                                                                                                                                             21.5%;
                                                                                                                                                                                                                               Conservative
                                                                                                                                           ; ORGANISM: Homo sapiens US-09-336-536-20
                                                                                                                                                                              Query Match
Best Local Similarity
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LENGTH: 244
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US-09-530-423-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49 HPGHNGTPGRDGTPGEKGEKGDAGLLGPKGETGDVGMTGAEGPRGFPQTPGRKGEPG 108
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 247;
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GENERAL INFORMATION:
APPLICANT: Sheppard, Paul O.
TITLE OF INVENTION: ADIPOCYTE-SPECIFIC PROTEIN HOMOLOGS
FILE REPERENCE: 97-30
CURRENT APPLICATION NUMBER: US/09/118,408A
CURRENT FILING DATE: 1998-07-17
EARLIER APPLICATION NUMBER: 60/053,154
EARLIER PILING DATE: 1997-07-18
                                                 GENERAL INFORMATION:
APPLICANT: Sheppard, Paul O.
APPLICANT: Humes, Jacqueline M.
TITLE OF INFUNION: ADIPOCYTE-SPECIFIC PROTEIN HOMOLOGS
FILE REFERENCE: 97-49
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SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/140,804
CURRENT FILING DATE: 1998-08-26
EARLIER APPLICATION NUMBER: 60/056,983
EARLIER FILING DATE: 1997-08-26
NUMBER OF SEQ ID NOS: 47
                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 8
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Sequence 8, Application US/09140804 Patent No. 6197930
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Best Local Similarity
Matches 82; Conserv
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Best Local Similarity
Matches 82; Conserv
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us-09-931-836-2.rai

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A NOVEL SERUM PROTEIN PRODUCED EXCLUSIVELY IN ADIPOCYTES
                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INC.

NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: WHIS
TELECOMMUNICATION INFORMATION:
TELEFAN: (617) 861-6240
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 246 anino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: DNA (genomic)
        TITLE OF INVENTION: A N
TITLE OF INVENTION: EXC
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: single
                                                                                                                    Massachusetts
                                                                                                                                                                                                                                                                                    CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                     FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
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US-09-370-838-185
                                                                                                  CITY: Le
STATE: M
COUNTRY:
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                                                             64 IPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGER----GQHGPKGEKGYP-----GIPP 114
                                                                                                    115 E----LOIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM 170
                                                                                                                          171 KHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG---A 226
                                                                                                                                                                                 115 E----LQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    171 KHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG---A 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64 IPCNHGNNGNNGATGHEGAKGEKGDKGDLGPRGER---GQHGPKGEKGYP-----GIPP 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 LLLQALLFLLILP-SHAEDDVTTTEELAPALVPPPKGTCA-----GWMA-----GIPG 48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYQGPPGPPGFPG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 247;
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Sheppard, Paul O.
APPLICANT: Sheppard, Paul O.
APPLICANT: Lasser, Gerald W.
APPLICANT: Lasser, Gerald W.
APPLICANT: Lasser, Gerald W.
TITLE OF INVENTION: INHIBITORS FOR USE IN HEMOSTASIS AND TITLE OF INVENTION: IMMUNE FUNCTION
FILE REPERENCE: 99-12
CURRENT APPLICATION NUMBER: US/09/506,855
CURRENT APPLICATION NUMBER: US/09/506,855
NUMBER OF SEQ ID NOS: 50
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 3
LENGTH: 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21.0%; Score 287; DB 4; Length 24; 31.9%; Pred. No. 3.8e-21; Live 40; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09506855
Patent No. 6448221
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4, Application US/08463911
Patent No. 5869330
GENERAL INFORMATION:
APPLICANT: Scherer, Philipp E.
APPLICANT: Lodish, Harvey F.
                                                                                                                                                                                                                             LHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                227 LYADNVNDSTFTGFLLY 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |: |: |: ||| ||||:
LYADNVNDSTFTGFLLY 243
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 31.9%
hes 82; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapien
US-09-506-855-3
                                                                                                                                                                                                                                                                                                                      -09-506-855-3
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Matches
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GEKGYPGIP-----PELQ-----IAFMASLATHFSNQNSGIIFSSVETNIGNF 147
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      51 GYQGPPGPPGPPGIPGNHGNNGNNGATGH-----EGAKGEKGDKGDLGPRGERGQHGPK 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92 GTSGLPGDPGPRGPPGEPGVEGRYKOKHQSVETVTRQTTQYPEANALVRFNSVVTNPQGH 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels 48;
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Fatent No. 644425
GENERAL INFORMATION:
APPLICANT: Reed, Steven G.
APPLICANT: Lodes, Michael J.
APPLICANT: Mohamath, Roadoh
TILLE OF INVENTION: COMPOUNDS FOR THERAPY AND DIAGNOSIS OF
TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR USE
TITLE OF INVENTION: 12090-1475C1
CURRENT APPLICATION NUMBER: US/09/370, 838
CURRENT APPLICATION NUMBER: US/09/370, 838
CURRENT FILING DATE: 1999-04-02
SEALIER RILING DATE: 1999-04-02
NUMBER OF SEQ ID NOS: 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 246;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199 GKSDTSSNHAVLKLAKGDEVWLRMG--NGALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199 NSKQVSSGGALLRLQRGDEVWLSVNDYNGWV-GIEGSNSVFSGFLLF 244
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C. STREET: Two Militia Drive CITY: Lexington
                                                                                                                                                               COMPUTER READABLE FORM:
MEDIOW TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURREW APPLICATION DATA:
APPLICATION NUMBER: US/08/463,911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 20.0%; Score 274; DB 2; Best Local Similarity 31.3%; Pred. No. 7.6e-20; Matches 71; Conservative 29; Mismatches 79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56 PGPPGPPGIPGNHGN-----NGNNGATGHEGAKGEKGD------KGDLGPRGERGQ 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HGPKGEKGYPGIPPELQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVS 160
                                                                                                                                                                                                                                                                     LMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGFL 241
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                  75 GATGHEGAKGEKGDKGDLGPRGERGQ-----HGPKGE----KGYPGIPPELQIAFMAS 123
                                                                                                                                                                                                                                                                                                                   124 LATHFS--NQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVY 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             509 GLP----SISNGNYSQLQFQAREYSGAPYSQRDNFQQCYKRGGTSGGPRANSRAGWSDSS 564
                                                                                                                                                   Gaps
                                                                                                                                                                                   ----GPPGPPGIPGNHGNNGNN 74
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19.3%; Score 264.5; DB 4; Length 228; 32.4%; Pred. No. 6.3e-19; Live 36; Mismatches 79; Indels 27
                                                                                                                Query Match 20.0%; Score 273; DB 4; Length 746; Best Local Similarity 29.6%; Pred. No. 4.4e-19; Matches 72; Conservative 43; Mismatches 90; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
US-09-336-536-4
; Sequence 4, Application US/09336536
; Patent No. 640684
; GENERAL INFORMATION:
; APPLICANT: Leiby, K.
; APPLICANT: BOSSONE, S.
; TITLE OF INVENTION: SECRETED PROTEINS AND USES THEREOF
; FILE REFRENCE: 7853-144
; CURRENT APPLICATION NUMBER: US/09/336,536
; CURRENT PILING DATE: 1999-06-18
; SOFTWARRE: PATENTING PATE: 1999-06-18
; SOFTWARRE: PATENTING PATE: 1008: 75
; SOFTWARRE: PATENTING PATE: 1008: 75
; SOFTWARRE: PATENTING PATE: 1008: 75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EVWLRMGNG---ALHGDHQRFSTFAGFLLF 243
SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 185
LENGTH: 746
                                                                                                                                                                                    34 GLPPDCSKCCHGDYS----FRGYQGPP--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 19.39
Best Local Similarity 32.49
Matches 68; Conservative
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CORGANISM: Homo sapiens
US-09-336-536-4
                                                        ; TYPE: PRT
; ORGANISM: Homo sapien
US-09-370-838-185
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743 LYQ 745
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Search completed: January 13, 2003, 10:44:35 Job time: 17 secs

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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

Run on:

January 13, 2003, 10:42:03 ; Search time 19 Seconds (without alignments) 1244.688 Million cell updates/sec

US-09-931-836-2 1367 1 MLWRQLIYWQLLALFFLPFC......LHGDHQRFSTFAGFLLFETK 246 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283224 seqs, 96134422 residues Searched:

283224 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	gelatin-binding 28	collagen alpha 10x	collagen alpha 1(X	collagen alpha 1(x	t subc		hypothetical prote	collagen alpha 1(V	collagen alpha 1(V	complement subcomp	complement subcomp		alpha		t subc			ecurso	complement subcomp	collagen alpha 1(V	hypothetical prote			alph	alpha	colla	collagen alpha 271	alpha	ion-rel
SUMMAKIES	ID	JC470				S29328			-			_					S49158									A61228				
	Query Match Length DB	244				246 2																		423		775	549		1712 1	
æ	Query Match		20.5	20.4	20.1	20.0	19.8		18.9			18.4	18.4	-	-		17.3		16.5		15.8								14.9	14.8
	Score	293.5	280.5	278.5	275	274	270	264.5	258.5	256.5	255	251.5	251.5	249	248	239.5	236.5	231.5	226	219	216	215	211.5	210.5	208	207.5	207.5	203.5	203.5	_
	Result No.	-	C4	e	4	ı,	9	7	æ ·	o i	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29

hibernation-relate collagen alpha 1(I	cerebellin-like gl collagen alpha 1(x	collagen alpha 1(X collagen alpha 1(I	collagen 1 - Caeno	collagen alpha 1(1	hypothetical prote cerebellin precurs	pulmonary surfacta	collagen alpha 1(I collagen alpha 1(X
C48150 A34493	A60032 A56101	B56101 S40991	A31219 T21314	S42617 CGHU7L	T26812 A37873	A45225 S59856	S40495 A53019
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215 171	224 1315	1774	301	921	289	375	921
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14	14	14	14	14	13	13	13
201	196 195.5	195.5 193.5	193	192.5	190.5	189	187.5
30	3 2	3 4 5 4	36	. & 6 . M M	41	4 4 3	44

ALIGNMENTS

	RESULT 1	
	gelatin	gelatin-binding 28K protein precursor - human
	C; Specie	N/Arternate names: autpose specific collagen-like factor C,Species: Homo sapiens (man)
	C;Date:	C:Date: 10-May-1996 #sequence_revision 19-Jul-1996 #text_change 20-Sep-1999 C:Accession: JC4708: JC4444
	R; Maeda,	R; Maeda, K.; Okubo, K.; Shimomura, I.; Funahashi, T.; Matsuzawa, Y.; Matsubara, K.
	Blochem A:Title:	. Biophys. Res. Commun. 221, 286-289, 1996 : CDNA cloning and expression of a novel adinose specific collager-like factor
	A; Refere	A; Reference number: JC4708; MUID:96224171; PMID:8619847
	A; Accest	A; Accession: JC4/08
	A; Residu	A; Molecule Cype: MINNA A; Residues: 1-244 < MAE>
	A; Cross.	A;Cross-references: DDBJ:D45371; NID:g871886; PIDN:BAA08227.1; PID:g871887
	R; Nakano	A)Experimental Source: adalpse tissue R.Nakano, Y.: Tobe, T.: Choi-miura, N.H.: Mazda, T.: Tomita, M.
	J. Bloch	nem. 120, 803-812, 1996
	A; Title:	A:Title: Isolation and characterization of GBP28, a novel gelatin-binding protein pur
	A; Access	sion: JC4944
	A; Molect	A; Molecule type: protein
	A; Residi	ies: 19-38;93-100;101-112;135-149;173-178 <nak> ht: This protein is an endocencie factor that binds with a collection-like domai</nak>
	C; Genet1	ics:
	A; Gene: apM1	apM1
	C; Superi	camily: unassigned collagens; complement C1g carboxyl-terminal homology
	F; 1-18/L	.us: autpose tissue; giycopiocein; nyaroxyproline Oomain: signal sequence #status predicted <sig></sig>
	F; 19-244	F;19-244/Product: gelatin-binding 28kDa protein #status experimental <mat></mat>
	F; 42-10, F: 114-24	F:74-10/Kegjon: collagen-like F:14-24/70cmain: complement Cla carboavi-terminal homology (Clo)
	F; 95/MOC	F:95/Modified site: 4-hydroxyproline (Pro) #status experimental
	F; 230/B1	Inding site: carbohydrate (Asn) (covalent) #status predicted
	Query	Match 21.5%; Score 293.5; DB 2; Length 244;
	Matche	best botal suminating 54.5%; Fred. NO. 78.17; Matches 76; Conservative 35; Mismatches 78; Indels 31; Gaps 9;
	Oy 5	33 QGPPGPPGPPGIPGNHGNNGATGHEGAKGEKGDKCDLGPRGE 97
	op 7	13 GGPGVLLPLPKGACTGWMAGIPGHPGHNGAPGRDGTPGEKGEKGDPGLLGPKGDIGE 82
	Oy 9	B RGOHGPKGEKGYPGIPPELQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
	Db 8	83 TGVPGAEGPRGFPGIOGRKGEPGEGAYVYRSAFSVGLETYVTIPNMPIRFTKIFYNOONH 142
	Qy 14	8 FDVMTGRFCAPVSCVYFFTFSMMKHEDVEEVXVYLMHNGNTVFSMYSYEMKGKSDTSSNH 207
	Db 14	: : : : : : : ::: : : 143 YDGSTGKFHCNIPGLYYFAYHITVYMKDVKVSLFKKDKAMLFTYDQYQENNVDQASGS 200
_	Qy 20	208 AVLKLAKGDEVWLRM-GNGALHGDHQRFSTFAGFLLF 243

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A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Molecule type: DNA
A; Molecule type: DNA
A; Residues: 52-247, 'L, 249-255, 'A, 287-305, 'F', 307-416, 'S', 418-499, 'L', 501-566, 'C', 56
A; Cross-references: EMBL: 865121; NID: 950482; PIDN: CA446237.1; PID: 9667031
B; Summers, T.A.; Irwin, M.H.; Mayne, R.; Balian, G.
J. Biol. Chem. 263, 581-587, 1988
A; Title: Monoclonal antibodies to type X collagen. Biosynthetic studies using an anti
A; Reference number: 826397; MUID: 88087150; PMID: 2826450
A; Accession: $226397
collagen alpha 1(X) chain precursor - mouse
C;Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 13-Aug-1999
C;Accession: S31216; S28807; S22215; S30127; I48299; S26397; S31830
R;Kong, R.Y.C.; Kwan, K.M.; Lau, E.T.; Thomas, J.T.; Boot-Handford, R.P.; Grant, M.E.
Bur. J. Blochem. 213, 99-111, 1993
A;Ritle: Intron-exon structure, alternative use of promoter and expression of the mou A;Reference number: S31216; MUID:93238750; PMID:8477738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: S30127
A; Status: preliminary
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
B; Molecule type: mNA
A; Mesidues: 1-12, Fr, 14-26, S', 28-247, L', 249-285, A', 287-305, F', 307-416, S', 418-499
B; Apte, S.S.; Seldin, M.F.; Hayashi, M.; Olsen, B.R.
Eur. J. Biochem: 206, 217-224, 1992
A; Title: Cloning of the human and mouse type X collagen genes and mapping of the mous
A; Title: Cloning of the human and mouse type X collagen
A; Reference number: 148299; MUID:92267014; PMID:1587271
A; Accession: 148299
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A; Residues: 1-680 < KON.
A; Residues: 1-680 < KON.
A; Residues: 1-680 < KON.
B; R. Silina, K.; Eerola, I.; Rosati, R.; Metsaeranta, M.; Garofalo, S.; Peraelae, M.; de Biochem. J. 289, 247-253, 1993
A; Title: The mouse collagen X gene: complete nucleotide sequence, exon structure and A; Reference number: S28807; MUID: 93143676; PMID: 8424763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Accession: $22215
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GDYSFRGYQGPPGPPGPPGIPGNHGNNGATG-----HEGAKGEKGDKGDLGPRGERG 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: mRNA
A;Residues: 385-450,'K',452-627 <ELA>
A;Cross-references: EMBL:X63013; NID:g49795; PIDN:CAA44741.1; PID:g49796
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Apte, S.S.; Olsen, B.R.
Matrix 13, 155-179, 1993
A;Title: Characterization of the mouse type X collagen gene.
A;Reference number: S30127; MUD:93261348; PMID:8492743
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein
A; Residues: 'SDGYFSQ', 24-26,'KQ' <SUM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: DNA
A;Residues: 1-285,'A',287-680 <ELI>
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                                                                                                                                                                                                                                                                     A; Accession: S31216
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A; Introns: 51/3
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Best Local Sim:
Matches 73;
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                                                                                                                                                                                        Signature alpha 1(X) chain precursor - chicken

NiAtternate names: type X collagen

NiAtternate names: type X collagen

C;Species: Gallus gallus (chicken)

Extracellular Watrix Genes, Sandell L.J. and Boyd C.D., eds., pp.79-114, Academic Pre A;Ritle: The molecular blology of collagens with short triple-helical domains.

A;Reference number: S2243

A;Residues: 1-674 cwinx

R;Lubvalle, P. in Nicomyay Y; Rosenblum, N.D.; Olsen, B.R.

A;Residues: 1-674 cwinx

A;Residues: 1-674 cwinx

A;Residues: 1-674 cwinx

A;Residues: 1-75 cwinx

A;Residues: 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119 AFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            179 YVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGN---GALHGDHQRFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2; Length 674;
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      20.5%; Score 280.5; DB 2; 30.9%; Pred. No. 2.3e-15; ive 23; Mismatches 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QHGPKGEKGYPGIP------PELQI-----
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Matches 76; Conservative
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SFSGFL 670
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S31216
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Righte, S.S.
submitted to the EMBL Data Library, March 1992
submitted to the EMBL Data Library, March 1992
A; Reference number: S30085
A; Reference number: S30085
A; Molecule type: DNA
A; Residues: 'TIPFYGWVCWVCLL', 52-680 <APT>
A; Residues: 'Mattel, M.G.; Olsen, B.R.
R; Apte, S.; Mattel, M.G.; Olsen, B.R.
R; Apte, S.; Mattel, M.G.; Olsen, B.R.
FEBS Lett. 282, 393-396, 1991
A; Title: Cloning of human alpha-1(x) collagen DNA and localization of the COLIOA1 gen
A; Reference number: S15826; MUID:91243838; PMID:2037056
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A; Residues: 561-647, 'G', 649-666 <AP2>
A; Cross-Loterences: EMBL:X58879; NID:930013; PIDN:CAA41686.1; PID:930014
A; Cross-references: EMBL:X58879; NID:930013; PIDN:CAA41686.1; PID:930014
B; Thomas, J.T.; Cresswell, C.J.; Rash, B.; Nicolai, H.; Jones, T.; Solomon, E.; Grant
Biochem J. 280, 617-623, 1991
A; Tille: The human collagen X gene. Complete primary translated sequence and chromoso
A; Reference number: S18249; MUID:92109659; PMID:1764025
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A; Residues: 547-656 KRE2
A; Cross-references: GB:M74050; GB:D57494; NID:9339884; PIDN:AAA61221.1; PID:9553796
A; Note: sequence extracted from NCBI backbone (NCBIN:69012, NCBIP:69014)
R; Wallis, G.A.; Rash, B.; Sweetman, W.A.; Thomas, J.T.; Super, M.; Evans, G.; Grant,
Am. J. Hum. Genet. 54, 169-178, 1994
A; Title: Amino acid substitutions of conserved residues in the carboxyl-terminal doma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Cross-references: EMBL: X68952; EMBL: X72578; EMBL: X72579; EMBL: X72580; GB: S47714; GB
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Cypecies: Homo sapiens (man)
Cypecies: Homo sapiens (man)
Cybecession: S26396; S30086; S18826; S18249; A43901; I51870; S21856
Cyccession: S26396; S30086; S18826; S18249; A43901; I51870; S21856
Cyccession: S26396; E.; Beier, F.; Luvalle, P.; Olsen, B.R.; von der Mark, K.; Bertling, FEBS Lett. 311, 305-310, 1992
A;Title: Genomic organization and full-length cDNA sequence of human collagen X.
A;Reference number: S26396; MUID: 93012005; PMID: 1397333
A;Accession: S26396
A;Molecule type: DNA
A;Residues: 1-680 <REI>
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A; Residues: 1-26, TT, 28-680 <THO>
A; Cross-references: EMBL:X60382; NID:930094; PIDN:CAA42933.1; PID:930095
A; Cross-references: EmBL:X60382; NID:930094; PIDN:CAA42933.1; PID:930095
A; Note: the sequence from Fig. 3 is inconsistent with that from Fig. 2 in having 532-R; Reichenberger, E.; Aigner, T.; von der Mark, K.; Stoss, H.; Bertling, W.
Bev. Balol. 184, 562-572, 1991
A; Title: In situ hybridization studies on the expression of type X collagen in fetal A; Reference number: A43901; MUID:92077285; PMID:1743401
                                                                                                                                                                                                                                                                                  105 GEKGYPGIP-----PELQ----IAFMASLATHFSNQNSGIIFSSVETNIGNF 147
                                                                                                                                                                                                                                                                                                                                                                                                                                   FDVMTGREGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSM-----YSYEMK 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51 GYQGPPGPPGPPGIPGNHGNNGNNGATGH-----EGAKGEKGDKGDLGPRGERGQHGPK 104
                                                                                                                                                                                                  GCYGIPGMPGMPGAPGKDGHDGLQGPKGEPGIPAVPGTQGPKGQKGEPGMPGHRGKNGPR 91
                                                                                                                                                                                                                                                                                                                                                           92 GTSGLPGDPGPRGPPGEPGVEGRYKQKHQSVFTVTROTTOYPEANALVRFNSVVTNPQGH
                                                                        48;
   Length 246;
                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199 GKSDTSSNHAVLKLAKGDEVWLRMG--NGALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199 NSKQVSSGGALLRLQRGDEVWLSVNDYNGWV-GIEGSNSVFSGFLLF
20.0%; Score 274; DB 2; 1
31.3%; Pred. No. 2.8e-15;
:1ve 29; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N; Alternate names: procollagen alpha 1(X) chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                collagen alpha 1(X) chain precursor - human
       Query Match
Best Local Similarity 31.39
Matches 71; Conservative
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R; Thomas, J. T.; Kwan, A.P.L.; Grant, M.E.; Boot-Handford, R.P.

By Chomas, J. T.; Kwan, A.P.L.; Grant, M.E.; Boot-Handford, R.P.

By Chomas, J. T.; Kwan, A.P.L.; Grant, M.E.; Boot-Handford, R.P.

By Title: Isolation of cDNAs encoding the complete sequence of bovine type X collagen. E

By Reference number: S13301; MUID: 91113131; PMID: 1703407

By Recession: S13301

A; Accession: S13301

A; Reclaus: 1-674 < THO>

A; Residues: 1-674 < THO>

A; Residues: 1-674 < THO>

A; Cross-references: EMBL: X53556; NID: 9263; PIDN: CAA37624.1; PID: 9264

A; Cross-references: EMBL: X53556; NID: 9263; PIDN: CAA37624.1; PID: 9264

C; Genetics:

A; Genetics: COLJOA1

C; Superfamily: collagen alpha 1(VIII) chain; complement clq carboxyl-terminal homology

C; Keywords: colled coil; extracellular matrix; glycoprotein; homotrimer

F: 1-18/Domain: signal sequence #status predicted < SIG>

F: 19-674/Product: collagen alpha 1(X) chain #status predicted < NAT>

F: 19-674/Product: collagen alpha 1(X) chain #status predicted < NAT>

F: 547-673/Domain: complement Clq carboxyl-terminal homology < CLQ>
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R;Petry, F.; Reid, K.B.M.; Loos, M.
Eur. J. Blochem. 209, 129-134, 1992
A;Title: Isolation, sequence analysis and characterization of cDNA clones coding for ecerebellin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Gross references: EMBL:X66295; NID:950228; PIDN:CAA46993.1; PID:950229
C;Superfamily: complement subcomponent Clq chain A; complement Clq carboxyl-terminal
F;122-245/Domain: complement Clq carboxyl-terminal homology <
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C;Species: Mus musculus (house mouse)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 20-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             collagen alpha 1(X) chain precursor - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 21-Nov-1993 #sequence_revision 23-Feb-1996 #text_change 13-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM---GNGALHGDHQRFSTFAGFLL 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 QHGPKGEKGYPGIP-----PELQIA----FMASLATHFSNQNSGII------ 136
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                                                                                                                                 PANGAPIPFDEILYNRQOHYDPRSGIFTCKIPGIYYFSYHV--HVKGTHVWVGLYKNGTP 620
           EPGLPGPPGPPGPPGQAVMPDGFIKAGQRPRLSGMPLVSANHGVTGMPVSAFTVILSKAY 562
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                                                                                                                                                                                                                             189 VFSMYSYE--MKGKSDISSNHAVLKLAKGDEVWLRMGN---GALHGDHQRFSIFAGFLL 242
                                                                                                                                                                                                                                                                   --TMYIYDEYSKGYLDQASGSAIMELTENDQVWLQLPNAESNGLYSSEYVHSSFSGFLV 677
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A;Accession: S29328
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 30.0% nes 72; Conservative
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A; Molecule type: mRNA
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C;Superfamily: complement Clq carboxyl-terminal homology
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les 79; Conserv
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                                                 Query Match
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                                                                              Best Local
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A; Across Teneratures: ubs:120035; Unim:120110
A; Introns: 52/1
A; Introns: 52/1
A; Introns: 52/1
A; Note: a defect in this gene may cause Schmid metaphyseal chondrodysplasia
C; Complex: type x collagen may be a homotrimer
C; Complex: type x collagen may be a homotrimer
C; Complex: type x collagen may be a homotrimer
C; Complex: type x collagen may be a homotrimer
C; Function:
C; Function: structural component of extracellular fibrous polymer specifically and tr
C; Superfamily: collagen alpha 1(VIII) chain; complement Clq carboxyl-terminal homology
F; 1-18/Domain: signal sequence #status predicted <NG2>
F; 19-56/Domain: amino-terminal nonhelical #status predicted <NG2>
F; 19-56/Domain: amino-terminal nonhelical #status predicted <NC2>
F; 520-680/Domain: amino-terminal nonhelical #status predicted <NC2>
F; 53-679/Domain: complement Clq carboxyl-terminal homology <Cl0>
F; 617/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                       A; Accession: I51870
A; Status: translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Residues: 520-597, 70', 599-680 < WAL>
A; Cross-references: GB:S68531; NID:9545180; PIDN:AAC60615.1; PID:9545181
A; Cross-references: GB:S68531; NID:9545180; PIDN:AAC60615.1; PID:9545181
A; Note: mutant sequence from patient with metaphyseal chondrodysplasia type Schmid
A; Note: a second mutant sequence with 614-Pro is also described
C; Comment: Prolines and lysines at the third position of the tripeptide repeating unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
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C;Species: Homo sapiens (man)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 02-Sep-2000
C;Accession: T14782
R;Ottenwelder, B.; Obermaier, B.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S. Bubmitted to the Protein Sequence Database, August 1999
A;Reference number: 218184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  162
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         419 GLPGPVGPA--GAKGMPGHNGEAGPRGAPGIPGTRGPIGPPGIPGFPGSKGDPGSPGPPG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
19.8%; Score 270; DB 1; Length 68
Best Local Similarity 28.5%; Pred. No. 1.7e-14;
Matches 75; Conservative 28; Mismatches 102; Indels
               A; Reference number: I51870; MUID:94136476; PMID:8304336
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                                                                                                                                                                                                                                                                                          A;Gene: GDB:COL10A1
A;Cross-references: GDB:128635; OMIM:120110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GN---GALHGDHORFSTFAGFLL 242
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A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-219 - OCTT>
A; Cross-references: EMBL:AL110261
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collagen alpha l(VIII) chain precursor - rabbit
C;Species: Oryccolagus cuniculus (domestic rabbit)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C;Accession: A34246
R;Yamaguchi, N.; Benya, P.D.; van der Rest, M.; Ninomiya, Y.
J. Biol. Chem. 264, 16022-16029, 1989
A;Title: The cloning and sequencing of alphal(VIII) collagen cDNAs demonstrate that tomains similar to those of type X collagen.
A;Reference number: A34246; MUID:89380199; PMID:2476437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Residues: 1-744 < YRA
A; Cross-references: CBN-J05042; NID:g164895; PIDN:AAA31204.1; PID:g164896
C; Superfamily: collagen alpha 1(VIII) chain; complement Clq carboxyl-terminal homolog
F; 1-20/Domain: signal sequence #status predicted <SIG>
F; 21-744/Product: collagen alpha 1(VIII) chain #status predicted <MAT>
E; 21-17/Region: amino-terminal nonhelical
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6
                                                                                                                         ---KGDLGPRGERGQ 100
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                                                                                                                                                                                                                                                                                           65 AGPTGPAGECSVPPRSAFSAKRSESRVPPPSDAPLPFDRVLVNEQGHYDAVTGKFTCQVP 124
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                     86 KGDKGDLGPRGERGQHGPKGEKGYPGIP------PELQI-------118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         486 GIPGD--OGLOGPPGIPGITGPSGPIGPPGIPGPKGEPGLPGPPGFPGVGKPGVAGLHGP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     166 TFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGN-
                                                               27;
Length 219;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 744;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;21-117/Region: amino-terminal nonhelical
F;118-571/Region: interrupted helical
F;572-744/Region: carboxyl-terminal nonhelical
F;572-744/Region: carboxyl-terminal homology <C1Q>
                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34 GLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGATGHEGA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
19.3%; Score 264.5; DB 2; 32.4%; Pred. No. 1.5e-14; ive 36; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18.9%; Score 258.5; DB 1; ilarity 30.3%; Pred. No. 1.7e-13; Conservative 24; Mismatches 103;
                                                                                                                     56 PGPPGPPGIPGNHGN-----NGNNGATGHEGAKGEKGD----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EVWLRMGNG---ALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              --GALHGDHQRFSTFAGFLLF 243
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Biochem . J. 231, 729-735, 1985
A;Title: Molecular cloning and characterization of the complementary DNA and gene cod
A;Reference number: A23422; MUID:86076906; PMID:3000358
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A; Residues: 28-253 CREL>
A; Residues: 28-253 CREL>
A; Cross-references: EMBL:X03084
A; Note: the authors translated the codon ACA for residue 46 as Ile
R; Redd, K.B.M.
Biochem. J. 179, 367-371, 1979
A; Title: Complete amino acid sequences of the three collagen-like regions present in
A; Reference number: A90304; MUID:80020137; PMID:486087
A; Recession: B90304; MUID:80020137; PMID:486087
A; Redid, K.B.M.; Thompson, E.O.P.
R; Redid, K.B.M.; Thompson, E.O.P.
Biochem. J. 173, 863-8684, 1978
A; Title: Amino acid sequence of the N-terminal 108 amino acid residues of the B chain
A; Reference number: A90301; MUID:79041552; PMID:708376
A; Molecule type: protein
ivation of Cir (enzyme), Cls (proenzyme), and the other eight components of complemen C:Comment: The Clg subcomponent is composed of nine subunits, six of which are disulf dimers of the C chain. Equimolar amounts of the A, B, and C chains are found after r
                                                                                                                                                                               A; Cross-references: GDB:128132; OMIM:120575
A; Map position: 1p36.3-1p34.1
A; Introns: 60/3
C; Superfamily: complement subcomponent Clq chain A; complement Clq carboxyl-terminal C; Reywords: complement pathway; glycoprotein; homodimer; hydroxylysine; hydroxyprolin F; 1-28/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                         F:29-245/Product: complement subcomponent Clq chain B #status predicted <MAT>
F:31-114/Domain: collagenous, triple helix <COL>
F:31-124/Domain: complement Clq carboxyl-terminal homology <CIO>
F:32.51.51.54/Domain: complement Clq carboxyl-terminal homology <CIO>
F:32.51.51.54.55.46.31.93.96.99.105/Modified site: 4 hydroxyproline (Pro) #status experimental
F:57.72.75/Modified site: 5-hydroxylysine (Lys) #status experimental
F:75/Binding site: carbohydrate (Lys) (covalent) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for the second position as Arg; they
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 148 QGDYDTSTGKFTCKVPGLYYFVYHA---SHTANLCVLLYRSGVKVVTFCGHTSK-TNQVN 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36 PGMPGLP------GAPGKDGYDGLPGPKGEPGIPAIPGIRGPKGQKGEPGLPGHPGKN 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30 PQTGGLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGNNGATGHEGAKGEKGDK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90 GDLGPRGERGQHGPKGEKGYPG----IPPELQIAFMASLATHF-SNQNSGIIFSSVETNI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          145 GNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 255; DB 1; Length 245; Pred. No. 1e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 18.7%; Score 255; DB 1; Length 24:
1 Similarity 33.5%; Pred. No. 1e-13;
75; Conservative 22; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     204 SGGVLLRLQVGEEVWLAVNDXYDMVGIQGSD----SVFSGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNHAVLKLAKGDEVWLRMGN----GALHGDHQRFSTFAGFLLF 243
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A;Molecule type: DNA
A;Residues: 'HS',1-32 <REI>
Note: the authors translated the codon AGT
A;Accession: A23422
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Best Local Similarity
                                                                                                                                                                       A; Gene: GDB:C1QG
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                                                                                                                                                           C; Accession: S15435
R; Muragaki, Y.; Mattei, M.G.; Yamaguchi, N.; Olsen, B.R.; Ninomiya, Y.
Eur. J. Blochem. 197, 615-622, 1991
A; Title: The complete primary structure of the human alpha-1(VIII) chain and assignment. A; Reference number: S15435; MUDD:91231001; PMID:2029894
A; Accession: S15435
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-744 <MUR>
A; Residues: 1-744 <MUR>
A; Residues: 1-744 <MUR>
A; Genetics:
C; Genetics: A; Gene: GDB:128104; OMIM:120251
A; Genes GDB:COL8Al
A; Gene: GDB:GDB:COL8Al
A; Gene: GDB:GDB:COL8Al
A; Gene: GDB:GDB:GDB:
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A;Title: Complete amino acid sequences of the three collagen-like regions present in sub A;Ritle: Complete amino acid sequences of the three collagen-like regions present in sub A;Reference number: A90304; MUID:80020137; PMID:486087
A;Accession: A03207
A;Molecule type: protein
A;Residues: 29-56,'P',58-65,'K',67-71,'P',73-83,'K',85-86,'D',88-89,'N',91-122 <REI>C;Comment: The first component of complement is a calcium-dependent complex of the three
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of the genes encoding the A-, B- and C-chains PMID:1706597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
9
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                                   collagen alpha 1(VIII) chain precursor - human
C;Species: Homo sapiens (man)
C;Date: 13-Jan.1995 #sequence_revision 13-Jan-1995 #text_change 13-Aug-1999
C;Accession: S15435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34 GLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNG-----NNGATGHEGAKGE 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       604 KKGKNGGPAYEMPAFTAELTAPFPPVGGPVKFNKLLYNGRQNYNPQTGIFTCEVPGVYYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ------AFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFF
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Blochem. J. 274, 481-490, 1991
A;Title: Characterization and organization of the careference number: S14350; MUID:91174759; PMID:17(A;Rcterence number: S14351
A;Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18.8%; Score 256.5; 29.9%; Pred. No. 2.4
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A; Residues: 1-245 <SEL>
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Matches
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722 QAAGLYAGQYVHSSFSGYLLY 742
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Best Local Similarity 30.00,
Thos 76; Conservative
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GFLLCPT (
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A;Residues: 28-99,'P',101-195 <RE3>
R;Reid, K.B.M.; Gaynon, J.; Frampton, J.
A;Title: Completion of the amino acid sequences of the A and B chains of subcomponent A;Reference number: A90315; MJID:82283890; PMID:6981411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Gallus gallus (chicken)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C;Accession: S3239
R;Minomiya, Y.; Castagnola, P.; Gerecke, D.; Gordon, M.K.; Jacenko, O.; LuValle, P.; Mc maguchi, N.; Olsen, B.R.
in Extracellular Matrix Genes, Sandell L.J. and Boyd C.D., eds., pp.79-114, Academic Pr A; Reference number: S2243
A;Aitle: The molecular biology of collagens with short triple-helical domains.
A;Reference number: S2243
A;Accession: S2329
A;Accession: S2329
A;Accession: S2329
A;Accession: S2329
A;Accession: Callagen alpha 1(VIII) chain; complement Clq carboxyl-terminal homology F;617-743/Domain: complement Clq carboxyl-terminal homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100 QHGPKGEKGYPGIP------PELQIAFMASLATHFS-NQNSGIIFSSVETNIG 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91 PKGPMGPKGGPGAPGAPGPKGESGDYKATQKIAFSATRIINVPLRRDQTIRFDHVITNMN 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 43 CHGDYSFRGYQGPPGPPGP---PGIPGNHGNNGANGATGHEGAKGEKGDKGDLGPRGERG 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -- MMKHEDVEEVYVYLMHNGNTVFSMYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   151 NNYEPRSGKFTCKVPGLYYFTYHASSRGNLCVNLMRGRERAQKVVTFCDYAYNTF----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 253;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 251.5; DB 1; Length 744;
; Pred. No. 6.2e-13;
24; Mismatches 104; Indels 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 195 YEMKGKSDTSSNHAVLKLAKGDEVWLR-MGNGALHGDHQRFSTFAGFLLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89;
                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 18.4%; Score 251.5; DB 1 Local Similarity 31.7%; Pred. No. 2.1e-13; les 73; Conservative 27; Mismatches 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         collagen alpha 1(VIII) chain - chicken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      146 NFFDVMTGRFGAPVSGVYFFTFS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18.4%;
ilarity 29.9%;
Conservative 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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9

34 GLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGATGHEGA-----KGE 85

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A, Cross-references: GDB:127812; OMIM:120252
A, Map position: 1p34.3-1p32.3
C. Superfamily: collagen alpha I(VIII) chain; complement C1q carboxyl-terminal homolog [F, 11/Domain: amino-terminal nonhelical (fragment) #status predicted <NC2>
F; 12-468/Region: interrupted helical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the short chain collagen f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Collagen alpha 2(VIII) chain - human (fragment)
C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Accession: A57131
R; Muragaki, Y.; Jacenko, O.; Apte, S.; Mattei, M.G.; Ninomiya, Y.; Olsen, B.R.
J. Biol. Chem. 266, 7721-7727, 1991
A; Tille: The alpha2(VIII) collagen gene. A novel member of the short chain collagerence number: A57131; MUD:91210292; PMID:2019595
543
                                                                                                                                                                                                                              604 KKGKNGGPAYEMPAFTAELTAPFPPVGAPİKFDRLLYNGRQNYNPQTGIFTCEVPGVYYF 663
                                                                                                                                                                                                                                                                                           TFSMMKHEDVEEVYYYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGN- 224
                                                                                                                                                                                                                                                                                                                                     45 GDYSFRGYQGPPGPPGPPGIPGNHGNNGANGATGHEGAKGEKGDKGDLGPRGERGQHGPK 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMH 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA A;Residues: 1-635 <MUR>
A;Residues: 1-635 <MUR>
A;Cross-references: GB:M60832; NID:g177178; PIDN:AAA62822.1; PID:g177179
                                                                                                          544 PGKPGALGPOGOPGLPGPPGPPGPPAVMPPTPAPQGEYLPDMGLGIDGVKTPHAYAA
                                                             ----PELQI------
                                                                                                                                                                       ------AFWASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      454 GPPGLPGPPGAPGAFDETGIAGLHLPNGGVEGAVLGKGGKPQFGLGELSAHATPAFTAVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----AFMASL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F;469-635/Dómain: carboxyl-terminal nonhelical #status predicted F;508-634/Domain: complement C1q carboxyl-terminal homology <C1Q>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18.2%; Score 249; DB 2; 30.8%; Pred. No. 8.5e-13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25; Mismatches
                                                   KGDKGDLGPRGERGQHGPKGEKGYPGIP--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
S23779
collagen alpha 1(VIII) chain - mouse
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Complement subcomponent C1q chain A precursor - mouse
Cippedies: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 20-Aug-1999
C;Accession: 519018
C;Accession: 519018
J. Immunol. 147, 3988-3993, 1991
A;Title: Gene expression of the A- and B-chain of mouse C1q in different tissues and the A;Reference number: 519018; MUID:92043789; PMID:1940381
A;Accession: 519018
A;
C; Species: Mus musculus (house mouse)
C; Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 16-Jun-2000
C; Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 16-Jun-2000
C; Accession: S23779
R; Muraqaki, Y.; Shiota, C.; Inoue, M.; Ooshima, A.; Olsen, B.R.; Ninomiya, Y.
Eur. J. Blochem. 207, 895-902, 1992
A:Title: Alpha-1(VIII)-collagen gene transcripts encode a short-chain collagen polypepti
A:Reference number: S23779
A:Setence number: S23779
A:Status: prealiminary
A:Status: prealiminary
A:Residues: 1-743 <AMBL:
A:Residues: 1-743 <AMBL:
A:Residues: 1-743 <AMBL:
C:Sexperferences: EMBL: X66976; NID:950493; PIDN:CAA47387.1; PID:g1359953
C; Superfamily: collagen alpha 1(VIII) chain; complement C1q carboxyl-terminal homology
F; 616-742/Domain: complement C1q carboxyl-terminal homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNG--NTVFSMYSYEMKGKSDTSSNHAVLK 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                486 GIPGD---GCLQGPPGIPGIVGPSGPIGPPGIPGPKGEPGLPGPPGFPGVGKPGVAGLHGP 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----- 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167 FSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLR----M 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 664 YHV--HCKGGNVWVALFKNNEPMMYTYDEYKKGFLDQASGSAVLLLRPGDQVFLQNPFEQ 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               544 PGKPGALGPQGQPGLPGPPGPPGPPGPPAVMPTPSPQGEYLPDMGLGIDGVKTPHAYAGK 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ....----AFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFT 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGATGHEGA-----KGE 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 743;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18.1%; Score 24%; DB 1; Length 74: 29.5%; Pred. No. 1.2e-12; tive 26; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KGDKGDLGPRGERGQHGPKGEKGYPGIP------PELQI----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               223 GNGALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 AAGLYAGQYVH-SSFSGYLLY 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 33.2%
Matches 71; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 29.59
Matches 77; Conservative
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S19018
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Qy 212 LAKGDEVWLRM--GNGALHGDHQRFSTFAGFLLF 243 | :|||||: | bb 209 LRRGDEVWIEKDPAKGRIYQGTEADSIFSGFLIF 242

Search completed: January 13, 2003, 10:44:13 Job time : 20 secs . .

us-09-931-836-2.rsp

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January 13, 2003, 10:31:58 ; Search time 12 Seconds (without alignments) 850.265 Million cell updates/sec
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1367
1 MLWRQLIYWQLLALFFLPFC......LHGDHQRFSTFAGFLLFETK 246
GenCore version 5.1.3
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                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                              112892 segs, 41476328 residues
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Maximum Match 100%
Listing first 45 summaries
                                                                                   OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
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Perfect score:
Sequence:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SwissProt_40:*

Database :

Descri	09bx12 homo sapien 09bx12 homo sapien 075973 homo sapien 075973 homo sapien 088992 mus musculu 060994 mus musculu 015848 homo sapien 09bx19 homo sapien 09bx19 homo sapien 09bx19 homo sapien 09bx19 homo sapien 073065 mus musculu P01105 mus musculu P02105 mus musculu P02105 homo sapien P14282 oryctolagus P27658 homo sapien P02747 homo sapien P55067 homo sapien P55067 homo sapien P31721 rattus nory P14106 mus musculu 09bx11 homo sapien P31721 rattus nory P14106 mus musculu 09bx11 homo sapien P18503 ephydatta m 002388 homo sapien P0872 homo sapien P0877 tamias sibi
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ch.	100-1-1 223.0 223.0 223.0 223.0 223.0 223.0 223.0 223.0 223.0 223.0 233.
& Query Match	
Score	2003 : 50 10 10 10 10 10 10 10 10 10 10 10 10 10
Result No.	

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                                                                                                                                                                                                                                                                                       PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
                                                                                                                                                                                                                                                                                                             61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
                                                                                                                                                                                                                                                                                                                                                                            MASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYV 180
                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
Piddington C.S., Sheppard P.O., Bishop P., Lasser G.W.;
"Homo sapiens complement-olg tumor necrosis factor related protein.";
Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                         Gaps
                                                                                                                                                                                                 1 MLWRQLIYWQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPG 60
                                                                                                                                                                                                                        Strausberg R.;
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN.
-!- SIMILARITY: CONTAINS 1 C1Q DOMAIN.
-!- FIMILARITY: CONTAINS 1 C1Q DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 YLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Complement-clq tumor necrosis factor-related protein 7 precursor.
ClQTNF7 OR CTRP7.
                                                                                                                                                         ö
                                                                                                              Length 246;
                                                                                                                                                      Indels
                                          K -> E (IN REF. 3).
C589B6C3A73E5D29 CRC64;
                                                                                                       Score 1367; DB 1;
Pred. No. 1.6e-108;
0; Mismatches 0;
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    COLLAGEN-LIKE.
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EMBL; BCO22187; AAH22187.1; -.
Genew; HGNC:14342; CIQTNF7.
InterPro; IPR001073; C19,
InterPro; IPR000087; Collagen.
Pfam; PF01391; Collagen; 2.
PRINTS; PR00007; COMPLENNTC10.
SMART; SM00110; C1Q; 1.
113 CC
246 C1
214 K
26994 MW;
                                                                                                              100.08;
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                                                                                                                                Best Local Similarity 100.
Matches 246; Conservative
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51 1
114 2
214 2
246 AA;
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241 LLFETK 246
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                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 PGRDGRDGRKGEKGEKGTAGLRGKTGPLGLAGEKGDQGETGKKGPIGPEGEKGEVGPIGP 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       104 -----KGEKGYPGIPP-----ELQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDV 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Piddington C.S., Bishop P.; "Homo sapiens complement-clq tumor necrosis factor-related protein."; Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                            14 LFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPGPPGPPGNHGNNGN 73
                                                 COMPLEMENT-C10 TUMOR NECROSIS FACTOR-RELATED PROTEIN 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           74 NGATGHEGAKGEKGD-----------KGDLGPRGERGQHGP---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 PGPKGDRGEQGDPGLPGVCRCGSIVLKSAFSVGITTSYPEERLPIIFNKVLFNEGEHYNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   151 MTGRFGAPVSGVYFFTFSMM---KHEDVEEVYVYLMHNGNTVFSMYSYEMK----GKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Complement-c1q tumor necrosis factor-related protein 2 precursor.
ClOTNP2 OR CTRP2.
                                                                                                                                                                                                                                                                                       72;
                                                                                                                                                                                                                          Length 289;
                                                                                                                                                                                                                                                                                     96; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted JUL 2001) to the EMBL/GenBank/DDBJ databases.
-!-SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN.
-!-SIMILARITY: CONTAINS 1 C1Q DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              202 DISSNHAVLKLAKGDEVWLRM----GNGALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               229 DVASGSTVIYLQPEDEVWLEIFFTDQNGLFSDPGWADSLFSGFLLY 274
                                                                                                                                                                   A61609FF86D26946 CRC64;
                                                                                                                                                                                                                          23.0%; Score 315; DB 1; 30.1%; Pred. No. 1.3e-19; iive 32; Mismatches 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Æ
                                                                                                                 COLLAGEN-LIKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               285
                                POTENTIAL.
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                                                                                                                                                                         30683 MW;
                                                                                                                                                                                                                                                                                          Conservative
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                                16
289
                                                                                                                 139
                                                                                                                                           141 2
289 AA;
                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 86; Conserv
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Collagen; Signal SIGNAL
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Q9BXJ5;
                                                                                                                                              DOMAIN
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144 IGNFFDVMTGRFGAPVSGVYFFTFS-MMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSD 202
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LGNNYDAASGKFTCNIPGTYFFTYHVLMRGGDGTSMWADLCKNGQVRASAIAQDADQNYD 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102 PGKPGPPGLPGAGGSGAISTATYTTVP---RVAFYAGL----KNPHEGYEVLKFDDVVTN 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGANGATGHEGAKGEKGD 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
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Pred. No. 3.5e-18;
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16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
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SEQUENCE FROM N.A.
MEDLINE-99097006; Pubmed-9878755;
                                                                                                                                                             EMBL; AF095154; AAC64186.1; --
EMBL; AF410771; AAK95248.1; --
EMBL; BC008798; AAH08798.1; --
InterPro; IPR001073; C1q.
InterPro; IPR000087; Collagen.
Pfam; PF00138; C1q; 1.
PRINTS; PR00107; CONPLEMNTC1Q.
SMART; SM00110; C10; 1.
PROSITE; PS01113; C10; 1.
                                                                                                                                                                                                                                                                                                                                                                                       16
258
115
258
26452 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clq-related factor precursor.
ClQRF OR CRF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21.8%;
34.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         76; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                           Collagen; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-OCT-2001
16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C1RF_MOUSE
088992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                              CHAIN
DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                         96 GER------PELQIAFMASL 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LMHNGNTVFSMYSYEMK-GKSDTSSNHAVLKLAKGDEVWLRM----GNGALHGDHQRFST 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58; Gaps
                                                                                                                                                                                                                                                                                                                                           SFRGYQGPPGPPGPP----GIP---GNHGNNGNNGATGHEGAKGEKGDKGDLGPR 95
                                                                                                                                                                                                                                                                                                                                                                        37 SLPGPQGPPGPPGAPGPSGMMGRMGFPGKDGQDGHDGDRGDSGEEGPPGRTGNRGKPGPK 96
                                                                                                                         POTENTIAL.
COMPLEMENT-CLQ TUMOR NECROSIS FACTOR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125 ATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM---KHEDVEEVYVY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Berube N.G., Swanson X.H., Bertram M.J., Kittle J.D., Didenko V., Baskin D.S., Smith J.R., Pereira-Smith O.M.; "Cloning and characterization of CRF, a novel Cig-related factor, expressed in areas of the brain involved in motor function."; Brain Res. Mol. Brain Res. 63:233-240(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                  Length 285;
                                                                                                                                                                                                                                                                                                          74; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg R.;
Strausberg R.;
Submitted (MAY 2001) to the EMBL/GenBank/DDBJ databases.
Submitted (MAY 2001) to the EMBL/GenBank/DDBJ databases.
--- TISSUE SPECIFICITY: EXPRESSED IN BRAINSTEM.
---- SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nickerson D.A.;
Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                            7E31FF9868D4EDFA CRC64;
                                                                                                                                                                                                                                                                ; Score 304; DB 1;
; Pred. No. 1.1e-18;
42; Mismatches 74
                                                                                                                                                                 RELATED PROTEIN 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-UN-2002 (Rel. 41, Last annotation update)
Clq-related factor precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  258 AA.
                                                                                                                                                                                    COLLAGEN-LIKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-99097006; PubMed-9878755;
Pfam; PF00386; Clq; 1.
Pfam; PF01391; Collagen; 2.
PRINTS; PR00007; COMPLEMNTC1Q.
SMART; SMO0110; ClQ; 1.
PROSITE; PS01113; ClQ; 1.
                                                                                                                                                                                                                          29952 MW;
                                                                                                                                                                                                                                                                22.2%;
29.6%;
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Matches 73; Conservative
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285
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143 2
285 AA;
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                                                                                            Collagen; Signal.
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270 FTGFLIY 276
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C1RF_HUMAN
075973;
                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                  DOMAIN
                                                                                                                                                                                                         DOMAIN
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CIRF_HUMAN
                                                                                                                                          CHAIN
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Gaps

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                                                                                                                                                                                                                                                                                                                                                                                                                                8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90 PGPVGPPGEKGEPGKPGPPGLPGSGGSGAISTATYTTVP---RVAFYAGL----KNPHEG 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---IIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFS-MMKHEDVEEVYVYLMHNGNTVF 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           143 YEVLKFDDVVTNLGNNYDAASGKFTCNIPGTYFFTYHVLMRGGDGTSMWADLCKNGQVRA 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89 KGDLGPRGERGQHGPKGEKGYPG------IPPELQIAFMASLATHFSNQNSG 134
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                29 SPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGNNGATGHEGAKGEKGD 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APM1_MOUSE STANDARD; PRT; 247 AA.
060994; Q65400; Q9DC68;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Adiponectin precursor (30 kDa adipocyte complement-related protein)
ACRP30) (Adipocyte specific protein AdipoQ).
APM1 OR ACRP30 OR ADIPOQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scherer P.E., Williams S., Fogliano M., Baldini G., Lodish H.F.; "A novel serum protein similar to Clq, produced exclusively in adipocytes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           191 SMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALH-GDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                21.8%; Score 297.5; DB 1; Length 258; 31.2%; Pred. No. 3.5e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                    F776E2D206EBF763 CRC64;
                                                                                                                                                                                                                                                                                                                   C1Q-RELATED FACTOR.
                                                                                                                                                                                                                                                                                                                                                                                                              31.2%; Pred. ...
                                                                                                                                                                                                                                                                                                       POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biol. Chem. 270:26746-26749(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Adipocyte;
MEDLINE-96070757; PubMed=7592907;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TIŠSUE-Fibroblast;
MEDLINE-96209999; PubMed-8631877;
Hu E., Liang P., Spiegelman B.M.;
                                                                                                                                                     MGD; MGI:1344400; CIqrf.
InterPro; IRRO10/73; C1q.
InterPro; IRRO10/03; Collagen.
Pfam; PF00386; C1q; 1.
Pfam; PF01391; Collagen; 1.
PRINTS; PR00007; COMPLEMNTC1Q.
PROSITE; PS01113; C1Q; 1.
Collagen; Signal.
                                                                                                                                        EMBL; AF095155; AAC64187.1; -.
                                                                                                                                                                                                                                                                                                                                                                  26485 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 31.2 tes 73; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Wouse)
                                                                                                                                                                                                                                                                                                                                                   123 ;
258 AA;
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                   RC STRAIN-C5PBL/G5; TSSUB-Heart;

RX MEDLINE-2108560; PubMed=11217851;

RA Arakawa T., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

RA Arakawa T., Hara A., Pukunishi Y., Konno H., Adachi J., Fukuda S.,

Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Saito T., Okazaki Y., Gojobori T., Bono H., Rasukawa T., Saito R.,

RA Kadota K., Matsuda H.A., Ashburner M., Batalow S., Casawant T.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner I., Washio T.,

RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,

RA Lons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,

RA Sato K., Schoenbach C., Saya T., Shbata Y., Storch K.-F.,

RA Sasaki H., Sato K., Schoenbach C., Saya T., Shbata Y., Storch K.-F.,

RA Sazaki H., Sato K., Wang K.H., Weitz C., Wilning L.,

RA Hayasharaki Y.,

RH, Wennerional and K., Hasegawa Y., Kawaji H., Kohtsuki S.,

RH, Punchional and A., Rayanizaki Y.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

RH, Punchional S., Wang K.H., Weitz C., Wilning L.,

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RH, RH, Weitz C., Wang K.H., Weitz C., Wilning L.,

RH, RH, Weitz C., Wang K.H., Weitz C., Wilning L.,

RH, RH, Weitz C., Wang K.H., Weitz C., W
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-1 FUNCTION: IMPORTANT NEGATIVE REGULATOR IN HEMATOPOIESIS AND IMMUNE SYSTEMS; MAY BE INVOLVED IN EDUIG INFLAMMATORY RESPONSES THROUGH ITS INHIBITORY FUNCTIONS. INHIBITS ENDOTHELIAL NF-KAPPAB SIGNALING THROUGH A CAMP-DEPENDENT PATHWAY. INHIBITS THY-ALPHA-INDUCED EXPRESSION OF ENDOTHELIAL ADHESION MOLECULES. INVOLVED IN THE CONTROL OF FAT METABOLISM AND INSULIN SENSITIVITY.

-1 SUBUNIT: HOMOOLIGOMER.
-1 SUBUNIT: HOMOOLIGOMER.
-1 TISSUE SPECIFICITY: SYNTHESIZED EXCLUSIVELY BY ADIPOCYTES AND SECRETED INTO SERUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yamauchi T., Kamon J., Waki H., Terauchi Y., Kubota N., Hara K., Mori Y., Kamon J., Waki H., Terauchi Y., Kubota N., Ezaki O., Akanuma Y., Gavrilova O., Vinson C., Reitman M.L., Kagechika H., Shudo K., Yoda M., Nakano Y., Tobe K., Nagai R., Kimura S., Tomita M., Froguel P., Kadowaki T.; The fat-derived hormone adiponectin reverses insulin resistance associated with both lipoatrophy and obesity.";
iipoQ is a novel adipose-specific gene dysregulated in obesity.";
Biol. Chem. 271:10697-10703(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -i- INDUCTION: DURING HORMONE-INDUCED ADIPOSE DIFFERENTIATION AND ACTIVATED BY INSULIN.
-i- SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN.
-i- SIMILARITY: CONTAINS 1 C1Q DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                               Das K., Lin Y., Widen E., Zhang Y., Scherer P.E.; "Chromosomal localization, expression pattern, and promoter anal of the mouse gene encoding adipocyte-specific secretory protein Acrp30.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berg A.H., Combs T.P., Du X., Brownlee M., Scherer P.E.;
"The adipocyte-secreted protein Acrp30 enhances hepatic insulin
                                                                                                                                                                                                                                                                                  Biochem. Biophys. Res. Commun. 280:1120-1129(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=21372498; PubMed=11479627;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=21372499; PubMed=11479628;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nature 409:685-690(2001).
                                                                                                                                  PubMed=11162643;
                                                                                                   SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION.
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Euteleostom1;

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Biochem.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             116 -----LQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 171 KHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG---A 226
                                                                                                                                                                                                                                                                                                                                                                                                                                          49 HPGHNGTPGRDGRDGTPGEKGEKGDAGLLGPKGETGDVGMTGAEGPRGFPGTPGRKGEPG 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
461ponectin precursor (30 KDa adjlocyte complement-related protein)
(ACRP30) (Adipose most abundant gene transcript 1) (apM-1) (Gelatin-
                                                                                                                                                                                                                                                                                                                                                                   34; Gaps
                                                                                                                                                                                                                                                                                                                                                                                   6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYQGPPGPPG 63
                                                                                                                                                                                                                                                                                                                                                                                                    2 LLLQALLFLLILP-SHAEDDVTTTEELAPALVPPPKGTCA-----GWMA-----GIPG 48
                       EMBL; 049915; ARB05706.1; -
REMBL; AR90466; AAK13417.1; -
REMBL; AR03138; BAB25597.1; -
REMBL; ARCD13138; BAB25597.1; -
REFPCO; IPR001073; C1q.
RICHEPPCO; IPR001073; C1q.
RICHEPPCO; IPR001073; C1q.
RPEAN; PF001391; C011agen.
RPEAN; PF001391; C011agen.
RPEAN; SM00110; C10; 1.
RPEANT; SM00110; C10; 1.
                                                                                                                                                                                                 HYDROXYLATION (BY SIMILARITY).
HYDROXYLATION (BY SIMILARITY).
HYDROXYLATION (BY SIMILARITY).
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HYDROXYLATION (BY SIMILARITY).
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                                                                                                                                                                                                                                                                                                                                                Length 247;
                                                                                                                                                                                                                                                                                                                                              ; Score 294; DB 1; Length 24; Pred. No. 6.5e-18; 40; Mismatches 102; Indels
                                                                                                                                                                                                                                                                  M -> V.
P -> S (IN REF. 2).
A -> S (IN REF. 2).
A -> G (IN REF. 2).
G -> N (IN REF. 2).
Y -> F (IN REF. 2).
137B687D873988C4 CRC64;
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COLLAGEN-LIKE.
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email to license@isb-sib.
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         EMBL; U37222; AAA80543.1; -.
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31.5%;
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APM1 OR ACRP30 OR GBP28.
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247 AA;
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Best Local Similarity
                                                                                                                                           Polymorphism.
or send an
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"cDNA cloning and expression of a novel adipose specific collagen-like factor, apMl (Adipose Most abundant Gene transcript 1).";
Blochem. Biophys. Res. Commun. 221:286-289(1996).
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Yamauchi T., Kamon J., Waki H., Terauchi Y., Kubota N., Hara K.,
Yamauchi T., Kamon J., Waki H., Terauchi Y., Kubota N., Hara K.,
Mori Y., Ide T., Murakami K., Tsuboyama-Kasaoka N., Ezaki O.,
Akanuma Y., Gavrilova O., Vinson C., Reitman M.L., Kagechika H.,
Shudo K., Yoda M., Nakano Y., Tobe K., Nagai R., Kimura S., Tomita M.,
Froguel P., Kadowaki T.;
"The fart derived hormone adiponectin reverses insulin resistance
associated with both lipoatrophy and obesity.";
Nat. Med. 7:941-946(2001).
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MEDLINE=20378830; PubMed=10918532;
Takahashi M., Arita Y., Yamagata K., Matsukawa Y., Okutomi K.,
Horie M., Shimomura I., Hotta K., Kuriyama H., Kihara S., Nakamura T.,
Yamashita S., Funahashi T., Matsuzawa Y.;
"Genomic structure and mutations in adipose-specific gene,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hara K., Boutin P., Mori Y., Tobe K., Dina C., Yasuda K., Yamauchi T., Otabe S., Okada T., Eto K., Kadowaki H., Hagura R., Akanuma Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Adiponectin, a new member of the family of soluble defense collagens, negatively regulates the growth of myelomonocytic progenitors and the functions of macrophages.";
Blood 96:1723-1732(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schaeffler A., Orso E., Palitzsch K.D., Buechler C., Drobnik W., Fuerst A., Schoelmerich J., Schmitz G.; The human apM-1, an adipocyte-specific gene linked to the family of TNF's and to genes expressed in activated T cells, is mapped to chromosome 1921.3-q23, a susceptibility locus identified for familial combined hyperlipidemia (FMP), a susceptibility locus identified for familial Blochem. Blophys. Res. Commun. 260:416-425(1999).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-99196984; PubMed-10095105;
Saito K., Tobe T., Minoshima S., Asakawa S., Sumiya J., Yoda M.,
Nakano Y., Shimizu N., Tomita M.;
"Organization of the gene for gelatin-binding protein (GBP28).";
Gene 229:67-73(1999).
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Yokota T., Oritani K., Takahashi I., Ishikawa J., Matsuyama A.,
Ouchi N., Kihara S., Funahashi T., Tenner A.J., Tomiyama Y.,
Matsuzawa Y.,
                                                                                                                                                                                                                                                                                                        Maeda K., Okubo K., Shimomura I., Funahashi T., Matsuzawa Y.,
Matsubara K.;
Chordata; Craniata; Vertebrata; Eutele
Primates; Catarrhini; Hominidae; Homo
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MEDLINE-21671103; PubMed-11812766;
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                                                                                                                                                                                                                TISSUE-Adipose tissue;
MEDLINE-96224171; Pubmed-8619847;
Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                   NCBI_TaxID-9606;
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SYSTEMS; MAY BE INVOLVED INTERCOLLEGAR AND ADDRESS THROUGH TEST INHIBITORY ENGINEERS THROUGH A CAMP-DEPENDENT PATHWAY. INHIBITS ENDOTHELIAL NF-KAPPAB SIGNALING THROUGH A CAMP-DEPENDENT PATHWAY. INHIBITS TNP-ALPHA-INDUCED EXPRESSION OF ENDOTHELIAL ADHESION MOLECOLES. INVOLVED IN THE CONTROL OF FAT METABOLISM AND INSULIN SENSITIVITY.

-1- SUBGNIT: HOMOOLIGOMER (POTENTIAL).

-1- SUBGRELLULAR LOCATION: SECRETED IN PLASMA.

-1- TISSUE SPECIFICITY: EXPRESSED ONLY IN THE ADIPOSE TISSUE.

-1- DISEASE: Defects in APMI are the cause of adiponectin deficiency, resulting in very low concentration of plasma adiponectin. Decreased adiponectin plasma levels are associated with obesity insulin resistance, and diabetes type 2.

-1- PHARMACEUTICAL: Adiponectin might be used in the treatment of diabetes type 2 and insulin resistance.
                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
Yazaki Y., Nagai R., Taniyama M., Matsubara K., Yoda M., Nakano Y., Kimura S., Tomita M., Kimura S., Ito C., Froguel P., Kadowaki T., "Genetic variation in the gene encoding adiponectin is associated with an increased risk of type 2 diabetes in the Japanese population."; Diabetes 51:536-540(2002).
                                                                         -! - FUNCTION: IMPORTANT NEGATIVE REGULATOR IN HEMATOPOIESIS AND IMMUNE
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Disease mutation; Obesity; Diabetes mellitus.
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InterPro; IPR000087; Collagen.
Pfam; PF001386; Clq; 1.
Pfam; PF01391; Collagen; 1.
PRINTS; PR00007; COMPLEMNTCLQ.
SMART; SM0110; ClQ; 1.
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                                                                                                                                                                                                                                                98 RGQHGPKGEKGYPGI-----PPE----LQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
                                                                                                                                                                                                                                                                                                          83 TGVPGAEGPRGFPGIQGRKGEPGEGAYVYRSAFSVGLETYVTIPNMPIRFTKIFYNQONH 142
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                                                                Gaps
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
Complement-clq tumor necrosis factor-related protein 6 precursor.
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N-LINKED (GLCNAC. . .) (POTENTIAL).
                                                                31;
   Length 244;
                                                                Indels
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--- SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN.
--- SIMILARITY: CONTAINS 1 C1Q DOMAIN.
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   DB 1;
21.5%; Score 293.5; DB 1 34.5%; Pred. No. 7.1e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RELATED PROTEIN 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                208 AVLKLAKGDEVWLRM-GNG---ALHGDHQRFSTFAGFLLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              278 AA.
                                                            35; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COLLAGEN-LIKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL, AF329842; AAK17966.1; --
EMBL, BC020551; AAH20551.1; --
Genew, HGNC:14343; C1QTNF6.
InterPro; IPR001073; C1Q.
InterPro; IPR001073; C1A.
InterPro; IPR001073; C1A.
Pfam; PF01386; C1Q; 1.
PRINTS; PR00007; COMPLEMNTC1Q.
SMARY; SM01110; C1Q; 1.
                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             138
278
91
                                Best_Local Similarity
Matches 76; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Collagen; Signal.
SIGNAL 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Clorne6 or ctre6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47
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139
91
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CQT6_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
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L Similarity
68; Conserv
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P08125;
                    Query Match
Best Local £
                                                                                                                                                                                   167
                                                Matches
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                                                                                                                                              49 FRGY-----QGPPGPPGPPGIPGNHGNNGATGHEGAKGEKGDKGDLGPRGERGQHG 102
                                                                                                                                                                                                 103 PKGEKGYPGIPPELQIAFMA----SLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGA 157
                                                                                                                                                                                                                          -KGEMGSPGAP--COKRFFAFSVGRKTALHSGEDFQTLLFERVFVNLDGCFDMATGQFAA 185
                                                                                                                                                                                                                                                                     Gaps
                                                                                                                  29 WAALLLFLL---MCEIPMVELTFDRAVASGCQRCCDSEDPLDPAHVSSASSGRPHALPE 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-20428709; Nubmed-10862616; Koide T., Aso A., Yorthuzi T., Nagata K.; Conformational requirements of collagenous peptides for recognition by the chapterone protein HSP47."; J. Biol. Chem. 275:27957-27963(2000).

--- TISSUE SPECIFICITY: EXPRESSED IN GLIAL CELLS.

--- SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN.
                                                                                                                                                            PVSGVYFFTFSMMKHE-DVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                        63;
                                            DB 1; Length 278;
                                                                        Indels
                                                                                         9 WQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCC---------
  G -> V (IN REF. 2).
: 27A82CA863F23D47 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C1Q.
; 529FBAF4B2191BC1 CRC64;
                                       21.2%; Score 289.5; DB 1
28.8%; Pred. No. 1.8e-17;
11ve 34; Mismatches 96
                                                                                                                                                                                                                                                                                                                                                                                                                         16-0CT-2001 (Rel. 40, Created)
16-0CT-2001 (Rel. 40, Last sequence update)
15-JUN-2002 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                       255 AA.
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COLLAGEN-LIKE.
                                                                                                                                                                                                                                                                                                           EVWLRM----GNGALHGDHQRFSTFAGFLL 242
                                                                                                                                                                                                                                                                                                                          11:1: | : 11:1 | 243 RVWVRLFKRQRENAIYSNDFDTYITFSGHLI 273
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                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
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InterPro; IPR000097; Collagen.
Pfam; PF00386; Clq; 1.
Pfam; PF01391; Collagen; 1.
PRINTS; PR00007; COMPLEMNTCLQ.
SMART; SM00110; ClQ; 1.
  21 G
30861 MW;
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255
111
255
2687
                                                                    Conservative
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  21
278 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gliacolin precursor.
                                                     Similarity
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255 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Signal.
                                                                 78;
                                                                                                                                                                                                                                                                                                                                                                                                   GLIC_MOUSE
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Collagen;
SIGNAL
                                       Query Match
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SEQUENCE
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                                                          61 PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
                                                                              FS-MMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNG 225
                                                                                                                                                                                                     SEQUENCE OF 1-75 FROM N.A.

MEDLINE=89054019; PubMed=2461368;
Luvalla P., Ninomiya Y., Rosenblum N.D., Olsen B.R.;
"The type X collagen gene. Intron sequences split the 5'-untranslated region and separate the coding regions for the non-collagenous aminoterminal and triple-helical domains.";
J. Biol. Chem. 263:18378-18385(1988).
                                                                                                                                              Eukaryota; Metazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "The developmentally regulated type X collagen gene contains a long open reading frame without introns."; J. Biol. Chem. 261:5041-5050(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBUNIT: HOMOTRIMER.
-!- PTM: PROLINES AT THE THIRD POSITION OF THE TRIPEPTIDE REPEATING UNIT (G-X-Y) ARE HYDROXYLATED IN SOME OR ALL OF THE CHAINS.
-!- SIMILARITY: STRONG, TO ALPHA 1 AND 2 TYPE VIII COLLAGENS.
-!- SIMILARITY: CONTAINS 1 C1Q DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 48-674 FROM N.A., AND SEQUENCE OF 103-117 AND 453-466. MEDLINE-86168227; Pubmed-3082876; Ninomiya Y., Gordon M., van der Rest M., Schmid T., Linsenmayer T., Olsen B.R.;
                                                                                                                       121 MASLATH-----FSNQNSG---IIFSSVETNIGNFFDVMTGRFGAPVSGVYFFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17;
    Length 255;
                                  Indela
   DB 1;
                                82:
; Score 285.5; DB
; Pred. No. 3.5e-17
32; Mismatches 8
                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                             674 AA.
                                                                                                                                                                                                                                                                                                                                                                                    01-AUG-1988 (Rel. 08, Created)
01-NOV-1991 (Rel. 20, Last sequence
15-UUL-1999 (Rel. 38, Last annotatio
COLlagen alpha 1(X) chain precursor.
20.98;
34.28;
                                                                                                                                                                                                                                                                  | |:: ::|||:|::
235 KAHGGNNKYSTFSGFIIY 253
                                                                                                                                                                                                                                                226 ALH-GDHQRFSTFAGFLLF 243
                               Conservative
                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gallus gallus (Chicken).
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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-93143676; PubMed-8424763;
Ellma K., Eerola I., Rosati R., Metsaranta M., Garofalo S., Perala M.,
de Crombrugghe B., Vuorio E.;
"The mouse collagen X gene: complete nucleotide sequence, exon
structure and expression pattern.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119 AFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEV 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      605 WVALYKNGSPVMYTYDEYQKGYLDQASGSAVIDLMENDQVWLQLPNSESNGLYSSEYVHS 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                          427 GINGEPGPRGPSGIPGVRGPIGPPGMPGAPGARGEAGAPGLPGPAGIVIKGLRGPMGPLG 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100 QHGPKGEKGYPGIP-------118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     487 PPGPKGNSGEPGLPGPPGPPGPPGQSTIPEGYVKGESRELSGMSFMKAGANQALTGMPVS 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGN---GALHGDHQRFS 235
                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    ----DKGDLGPRGERG 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
NCBI_TaxID=10090;
                                                                                                      InterPro; IPR001073; C1q.
InterPro; IPR001087; C1q.
InterPro; IPR000087; Collagen.
Pfam; PF00391; Calfaen.
Promisp: PF00391; Collagen: 8.
PRINTS; PR00007; COMPLEMNTC1Q.
SMART; SM00110; C1Q; 1.
PR051TE; PS01113; C1Q; 1.
Extracellular matrix; Connective tissue; Repeat; Hydroxylation;
                                                                                                                                                                                                                                                                                                                                                                                                          57;
                                                                                                                                                                                                                                                                                                                                                                               Score 280.5; DB 1; Length 674; Pred. No. 2.7e-16;
                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                  COLLAGEN ALPHA 1(X) CHAIN. NONHELICAL REGION (NC2). TRIPLE-HELICAL REGION.
                                                                                                                                                                                                                                                                                                                                       HYDROXYLATION.
EAB48B1EF174B145 CRC64;
                                                                                                                                                                                                                                                                                              NONHELICAL REGION (NC1).
                                                                                                                                                                                                                                                                                                                                                                                                           90;
                                                                                                                                                                                                                                                                                                                                                                                                                                     51 GYQGPPGPPGPPGIPGNHGNNGNNGATGHEGAKGEKG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               680 AA.
                                                                                                                                                                                                                                                                                                                                                                                                           23; Mismatches
                                                                                                                                                                                                                                                                                                                         HYDROXYLATION
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                                                                      EMBL; M13496; AAA48736.1; ALT_SEQ.
                                                                                                                                                                                                                                                                                                                                                        66434 MW;
                                                                                                                                                                                                                                                                                                                                                                                 20.5%;
30.9%;
                                                                                                                                                                                                                           Cartilage; Collagen; Signal.
                                                                                   EMBL; J04194; AAA48634.1; -
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                                                                                                                                                                                                                                                     674
52
512
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                                                                                                  PIR; A31896; A31896.
                                                                                                                                                                                                                                                       19 6 19 53 53 51 513 65 539 6453 4456 4453
                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           665 SFSGFL 670
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                                                                                                                                                                                                                                                                                                                                                                                                              16;
                                                                                                                                                                                                                                                                                                                            MOD_RES
MOD_RES
SEQUENCE
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DOMAIN
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CA1A_MOUSE
                                                                                                                                                                                                                                                        CHAIN
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                                                                                                   "Intron-exon structure, alternative use of promoter and expression of "Intron-exon structure, Coll0a-1."; the mouse collagen X gene, Coll0a-1."; Eur. J. Biochem. 213:99-111(1993).
                                                                                                                                                                                                 MEDLINE=92267014; PubMed=1587271; Apte S.S., Seldin M.F., Hayashi M., Olsen B.R.; Apte S.S., Seldin M.F., Hayashi M., Olsen B.R.; Cloning of the human and mouse type X collagen genes and mapping of the mouse type X collagen gene to chromosome 10."; Eur. J. Biochem. 206:217-224(1992).
                                                                                                                                                                                                                                                                                                                                                  Elima K., Metsaeranta M., Kallio J., Peraelae M., Eerola I.,
Garofalo S., de Crombrugghe B., Vuorio E.;
"Specific Nybridization probes for mouse alpha 2(IX) and alpha 1(X)
collaqen mRNAs.";
Biochim. Blophys. Acta 1130.78-80(1992).
-!-FUNCTION: TYPE X COLLAGEN IS A PRODUCT OF HYPERTHROPHIC
GHONDROTOCYTES AND HAS BEEN LOCALIZED TO PRESUMPTIVE
MINERALIZATION ZONES OF HYALINE CARTILAGE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -:- SUBDIVIT: HOMOTRIMER.
-:- PIM: PROLINES AT THE THIRD POSITION OF THE TRIPEPTIDE REPEATING UNIT (GA.Y.Y) ARE HYDROXICATED IN SOME OR ALL OF THE CHAINS.
-:- SIMILARITY: STRONG, TO ALPHA 1 AND 2 TYPE VIII COLLAGENS.
-:- SIMILARITY: CONTAINS 1 C1Q DOMAIN.
                         SEQUENCE FROM N.A.
STRAIN=129/Sv; TISSUE=Liver;
STRAIN=129/Sv; TISSUE=Liver;
MEDILINE=92138750; PubMed=8477738;
Kong R.Y.C., Pubmed B.T., Thomas J.T., Boot-Handford R.P.,
Grant M.E., Cheah K.S.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITI: PSO1113; ClQ: 1. Extracellular matrix; Connective tissue; Repeat; Hydroxylation; Cartilage; Collagen; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NONHELICAL REGION (NC2).

TRIPLE-HELICAL REGION.

NONHELICAL REGION (NC1).

C10.

P -> L (IN REF. 3).

L -> F (IN REF. 3).

L -> F (IN REF. 3).

T -> S (IN REF. 3).

R -> K (IN REF. 3).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
                                                                                                                                                                                                                                                                                                                               STRAIN=C57BL/6;
MEDLINE=92182017; PubMed=1543751;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X67348; CAA47763.1; EMBL; X65121; CAA46237.1; EMBL; X65013; CAA4741.1; EMBL; Z21610; CAA79736.1; PIR; S2807; S2807. PIR; S31216; S31216. PIR; S2215; MGD; MGI-88445; CO110al. InterPro; IPR001073; C1q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRINTS; PRO0007; COMPLEMNTC1Q.
ProDom; PD000007; Collagen; 2.
SMART; SM00110; C1Q; 1.
Biochem. J. 289:247-253(1993).
                                                                                                                                                                                                                                                                                                          SEQUENCE OF 385-627 FROM N.A.
                                                                                                                                                                            SEQUENCE OF 51-680 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00386; Clq; 1.
Pfam; PF01391; Collagen; 9.
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CONFLICT
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                                                                                                                                                                                             OHGPKGEKGYPGIP------PELQ------IAFMASLATHF 128
                                                                                                                                                                                                                                                                     503 EPGLPGPPGPPGPPGQAVMPDGFIKAGQRPRLSGMPLVSANHGVTGMPVSAFTVILSKAY 562
                                                                                                                                                                                                                                                                                                     SNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNT 188
                                                                                                                                                                                                                                                                                                                         563 PAVGAPIPFDBILYNRQOHYDPRSGIFTCKIPGIYYFSYHV--HVKGTHVWGGLYKNGTP 620
                                                                                                                                                    Gaps
                                                                                                                                                                          45 GDYSFRGYQGPPGPPGPPGIPGNHGNNGNNGATG----HEGAKGEKGDKGDLGPRGERG 99
                                                                                                                                                                                                                                                                                                                                                                  189 VFSMYSYE--MKGKSDTSSNHAVLKLAKGDEVWLRMGN---GALHGDHQRFSTFAGFLL 242
                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-91113131; PubMed-1703407;
Thomas J.T., Kwan A.P.L., Grant M.E., Boot-Handford R.P.;
"Isolation of cDNAs encoding the complete sequence of bovine type X collagen. Evidence for the condensed nature of mammalian type X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -1- SUBUNIT: HOMOTRIMER.
-1- PTM: PROLINES AT THE THIRD POSITION OF THE TRIPEPTIDE REPEATING UNIT (G-x-Y) ARE HYDROXYLATED IN SOME OR ALL OF THE CHAINS.
-1- SIMILARITY: STRONG, TO ALPHA I AND 2 TYPE VIII COLLAGENS.
-1- SIMILARITY: CONTAINS 1 C1Q DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
                                                                                                                                                  45;
                                                                                                                 DB 1; Length 680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     collagen genes.";
Blochem. J. 273:141-148(1991).
-1- FUNCTION: TYPE X COLLAGEN IS A PRODUCT OF HYPERTHROPHIC CHONDROTOCYTES AND HAS BEEN LOCALIZED TO PRESUMPTIVE MINERALIZATION ZONES OF HYALINE CARTILAGE.
                                                                                                                                                  Indels
 H -> L (IN REF. 3).
A -> C (IN REF. 3).
I -> H (IN REF. 3).
ED -> IY (IN REF. 3).
O -> T (IN REF. 3).
W; FE984CA99AF708E2 CRC64;
                                                                                                                            No. 4.1e-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     674 AA
                                                                                                                                               73; Conservative 34; Mismatches
                                                                                                               20.4%; Score 278.5; 30.5%; Pred. No. 4.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Collagen alpha 1(x) chain precursor COL10A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1991 (Rel. 20, Created)
01-NOV-1991 (Rel. 20, Last seq
15-JUL-1999 (Rel. 38, Last anno
                                                                               66775 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIR; S13301, S13301.
InterPro; IPR001073; C1q.
InterPro; IPR000087; Collagen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; X53556; CAA37624.1; -.
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635
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus (Bovine).
                                569
571
635
680 AA;
                                                                                                                            Best Local Similarity
Matches 73; Conserv
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P23206:
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186 GNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM---GNGALHGDHQRFSTFAGFLL 242
                                                                                                                                                                                                                                                                                                                                                                               137 -----FSSVETNIGNFEDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHN 185
                                                                                                                                                                                                                                                                                                         434 GHNGEAGPRGVPGIPGTRGPIGPPGIPGFPGSKGDVGTPGPPGPAGIAVKGLNGPTGPPG 493
                                                                                                                                                                                                                                                                                                                                 100 QHGPKGEKGYPGIP-----PELQIA----FMASLATHFSNQNSGII------ 136
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                   51 GYQGPPGPPGPPGIPGNHGNNGATGHEGAKGEKGD------KGDLGPRGERG
                                                                                                                                                                                                                                                                                                                                                                                               554 KAYPAIGTPIPFDKILYNKQOHYDPRTGIFTCKIPGIYYFSYHI--HVKGTHAWVGLYKN
                                                                                                                                                                                                                                                                                                                                                         194 PPGPRGNAGEPGLPGPPGPPGPPGQVALPEDFVKAGQRPFVSANQGVTGMPVSAFTVILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-ICR; TISSUE-Macrophage;
MEDLINE-93011118; PubMed-1396691;
Petry F., Reid K.B.M., Loos M.;
"Isolation, sequence analysis and characterization of cDNA clones
                                                                                                                                                                HYDROXYLATION (BY SIMILARITY).
HYDROXYLATION (BY SIMILARITY).
HYDROXYLATION (BY SIMILARITY).
N-LINKED (GLCNAC. .) (POTENTIAL).
CD4CA73A03E004CA CRC64;
PRINTS: PROMONOT; CONTAGEN: 9.
PRINTS: PROMONOT; COMPLEMNTCIO.
PRODOM: PROMONOT; COLDAGEN: 1.
SMART; SM00110; C1Q; 1.
EXTRACELLUS: ROULIS; C1Q: 1.
Extracellular matrix; Connective tissue; Repeat; Hydroxylation; Cartilage; Collagen; Signal; Glycoprotein.
                                                                                                                                                                                                                                                               50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 coding for the C chain of mouse Clq. Sequence similarity of complement subcomponent Clq, collagen type VIII and type X and precerebellin.";
                                                                                                                                                                                                                                       DB 1; Length 674;
                                                                                                                                                                                                                                                              87; Indels
                                                                                                           COLLAGEN ALPHA 1(X) CHAIN.
                                                                                                                   NONHELICAL REGION (NC2).
TRIPLE-HELICAL REGION.
NONHELICAL REGION (NC1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-1993 (Rel. 26, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Complement Clq subcomponent, C chain precursor.
                                                                                                                                                                                                                                     Score 275; DB 1;
Pred. No. 8e-16;
                                                                                                                                                                                                                                                              31; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eur. J. Blochem. 209:129-134(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-1993 (Rel. 26, Created)
01-JUL-1993 (Rel. 26, Last seq
16-OCT-2001 (Rel. 40, Last anno
                                                                                                                                                                                                                65546 MW;
                                                                                                                                                                                                                                      20.1%;
30.0%;
                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
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                                                                                                                                                                                                                674 AA;
                                                                                                                                                                                                                                                 Similarity
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53
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Q02105;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7;
      CIR(2)CIS(2) PROGNEYME COMPLEX, AND EFFICIENT ACTIVATION OF CITAKES PLACE ON INTERACTION OF THE GLOBULAR HEADS OF CLO WITH THE EVERGENORS OF IGG OR IGM ANTIBODY PRESENT IN IMMUNE COMPLEXES. SUBUNIT: C1 IS A CALCLUM-DEPENDENT TRIMOLECULAR COMPLEX OF C10, RAND S IN THE MOLAR RATION OF 1:2:2. C1Q SUBCOMPONENT IS COMPOSED A AND B CHAINS, SIX OF WHICH ARE DISULFIDE-LINKED DIMERS OF THE C CHAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GEKGYPGIP-----PELQ-----IAFMASLATHFSNQNSGIIFSSVETNIGNF 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GYQGPPGPPGPPGIPGNHGNNGATGH-----EGAKGEKGDKGDLGPRGERGQHGPK 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COLLAGEN-LIKE REGIONS OF C1Q INTERACT WITH THE CA(2+)-DEPENDENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSM-----YSYEMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   152 YNPSTGKFTCEVPGLYYFVY-----YTSHTANLCVHLNLARVASFCDHMF
                                                                                                                                                                                                                                                                                                                                                                                                      Hydroxylation; Glycoprotein; Collagen;
                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPLEMENT C1Q SUBCOMPONENT, C CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INTERCHAIN (WITH OTHER C CHAIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20.0%; Score 274; DB 1; Length 246; 31.3%; Pred. No. 3.2e-16; ive 29; Mismatches 79; Indels 4
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HYDROXYLATION (BY S
2F79EA1274BCB8E0
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                                                                                                                SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN. SIMILARITY: CONTAINS 1 C1Q DOMAIN.
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HYDROXYLATION
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EMBL, X92960; CAA63535.1; -.
PIR, S29328; S29328.
MGD; MGI:88225; C1qc.
InterPro; IPR001073; C1q.
InterPro; IPR001087; Collagen.
Pfam; PP01391; Collagen.
PRINTS; PR00007; COMPLEMNTC1Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25966 MW;
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PROSITE; PS01113; C10; 1.
Complement pathway; Plasma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71; Conservative
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40
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246
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32
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SIGNAL 1
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Kuivaniemi H., Tromp G., Prockop D.J.;
"Mutations in fibrillar collagens (types I, II, III, and XI), fibril-associated collagen (type IX), and network-forming collagen (type X) cause a spectrum of diseases of bone, cartilage, and blood vessels.";
Hum. Mutat. 9:300-315(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VARIANTS SMCD ASP-598 AND PRO-614.
MEDLINE-94136476; PubMed-8304336;
Wallis G.A., Rash B., Sweetman W.A., Thomas J.T., Super M., Evans G., Grant M.E., Boot-Handford R.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                 Genomic organization and full-length cDNA sequence of human collagen
                                                                                                                                                                                                                             MEDLINE-92109659; PubMed-1764025; Thomas J.T., Cresswell C.J., Rash B., Nicolai H., Jones T., Solomon E., Grant M.E., Boot-Handford R.P.; "The human collagen X gene. Complete primary translated sequence and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     jo
                                                                                                                                                                                                                                                                                                                                                                 MEDIINE-93012005; Pubmed-1397333;
Reichenberger E., Beier F., Luvalle P., Olsen B.R., von der Mark K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 547-655 FROM N.A.
MEDLINE-92077285; PubMed=1743401;
Reichenberger E., Aigner T., von der Mark K., Stoeb H., Bertling W.;
"In situ hybridization studies on the expression of type X collagen in fetal human cartilage."
Dev. Biol. 148:562-572(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genes and mapping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA and localization of the human chromosome 6.";
                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
Beier F., Lammi M.B., von der Mark K.;
Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 52-680 FROM N.A.
MEDLINE-92267014; PubMed=1587271;
Apte S.S., Seldin M.F., Hayashi M., Olsen B.R.;
"Cloning of the human and mouse type X collagen
the mouse type X collagen gene to chromosome 10.
Eur. J. Blochem. 206:217-224(1992).
                                             01-NOV-1995 (Rel. 32, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
              680 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 561-666 FROM N.A.
MEDLINE-91243838; PubMed=2037056;
Apte S., Mattei M.-G., Olsen B.R.;
"Cloning of human alpha 1(X) collagen 1colloAl gene to the q21-q22 region of FEBS Lett. 282:393-396(1991).
                                                                                               Collagen alpha 1(X) chain precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REVIEW ON VARIANTS.
MEDLINE=97255959; PubMed=9101290;
                                                                                                                                                                                                                                                                                                         chromosomal localization.";
Biochem. J. 280:617-623(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                      'EBS Lett. 311:305-310(1992)
                 STANDARD;
                                                                                                                                    Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                       NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                        Bertling W.M.;
              CA1A_HUMAN
Q03692;
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                                                                                                                    COLIDAL
CA1A_HUMAN
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us-09-931-836-2.rsp

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-99069781; PubMed-9852679; Sawal H., Ida A., Nakata Y., Koyama K.; Sawal H. assemutation resulting in the substitution of tyrosine by "Novel missense mutation resulting in the substitution of tyrosine by cysteine at codon 597 of the type X collagen gene associated with Schmid metaphyseal chondrodysplasia."; J. Hum. Genet. 43:259-261(1998).

-1-FUNCTION: TYPE X COLLAGEN IS A PRODUCT OF HYPERTHROPHIC CHONDROTOCYTES AND HAS BEEN LOCALIZED TO PRESUMPTIVE MINERALIZATION ZONES OF HYALINE CARTILAGE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBUNIT: HOMOTRIMER.

FIM: PROLINES AT THE THIRD POSITION OF THE TRIPEPTIDE REPEATING UNIT (G-X-Y) ARE HYDROXYLATED IN SOME OR ALL OF THE CHAINS.

DISEASE: DEFECTS IN COLLA01 ARE THE CAUSE OF SCHMID TYPE
METAPHYSEAL CHONDRODYSPLASIA (SMCD), A DOMINANTLY INHERITED
DISORDER OF THE OSSEOUS SKELETON. THE CARDINAL FEATURES OF THE PHENOTYPE ARE MILD SHORT STATURE, COXA VARA AND A WADDLING GAIT.

RADIOGRAPHY USUALLY SHOWS SCLEROSIS OF THE RIBS, FLARING OF THE METAPHYSES, AND A WIDE IRREGULAR GROWTH PLATE, ESPECIALLY OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-95181449; PubMed-7876225; Chan D., Cole W.G., Rogers J.G., Bateman J.F.; Type X collagen multimer assembly in vitro is prevented by a Gly618 multation in the alpha I(X) NCl domain resulting in Schmid metaphyseal chondrodysplasia."; J. Blol. Chem. 270:4558-4562(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ikegawa S., Nakamura K., Nagano A., Haga N., Nakamura Y.; "Mutations in the N-terminal globular domain of the type X collagen gene (COLLOMA) in patients with schmid metaphyseal chondrodysplasia."; Hum. Mutat. 9:131-135(1997).
"Amino acid substitutions of conserved residues in the carboxyl terminal domain of the alpha 1(X) chain of type X collagen occur in two unrelated families with metaphyseal chondrodysplasia true Schmid".
                                                                                                                                                                                                                                      MEDLINE-94272470; PubMed-8004099; McIntosh I., Abbott M.H., Warman M.L., Olsen B.R., Francomano C.A.; "Additional mutatlons of type X collagen confirm Coll0Al as the Schmid metaphyseal chondrodysplasia locus."; Hum. Mol. Genet. 3:303-307(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-96375754; PubMed-8782043; Wallis G.A., Rash B., Sykes B., Bonaventure J., Maroteaux P., Zabel B., Wynne-Davies R., Grant M.E., Boot-Handford R.P.; "Mutations within the gene encoding the alpha 1 (X) chain of type 3 collagen (COL10A1) cause metaphyseal chondrodysplasia type Schmid not several other forms of metaphyseal chondrodysplasia type Schmid J. Med. Genet. 33:450-457(1996).
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Am. J. Hum. Genet. 63:1659-1662(1998).
                                                                                                                                          J. Hum. Genet. 54:169-178(1994).
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                                                                                                                                                                                                                VARIANT SMCD ARG-591
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                                                                                                      type Schmid.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
           DISEASE: DEFECTS IN COLIOAL ARE THE CAUSE OF SPONDYLOMETAPHYSEAL DYSPLASIA (SMD). SMD COMPRISES A HETEROGENEOUS GROUP OF HERITABLE SKELETAL DYSPLASIAS CHARACTERIZED BY MODIFICATIONS OF THE VERTEBRAL BODIES OF THE SPINE AND METAPHYSES OF THE TUBULAR BONES. SIMILARITY: STRONG, TO ALPHA 1 AND 2 TYPE VIII COLLAGENS. SIMILARITY: CONTAINS 1 C1Q DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             419 GLPGPVGPA--GAKGMPGHNGEAGPRGAPGIPGTRGPIGPPGIPGFPGSKGDPGSPGPPG 476
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InterPro; IPR001087; Collagen.
Pfam; PF00389; C1q: 1.
Pfam; PF01391; Collagen: 8.
PRINTS; PR00007; COMPLEMNTC1Q.
SMART; SM00110; C1Q; 1.
Extracellular matrix; Connective tissue; Repeat; Hydroxylation; Cartilage; Collagen; Signal; Disease mutation; Polymorphism.
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NONHELICAL REGION (NC1).
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G -> E (IN SMCD).

/FTIG=VAR_001838.

G -> R (IN SMCD).

/FTIG=VAR_001839.
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Pred. No. 2.1e-15;
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C -> R (IN SMCD).
/FTId-VAR_001841.
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                                                                                                                                                                                                                 EMBL, X60382; CAA42933.1; -.
EMBL, X65120; CAA46236.1; -.
EMBL, X98568; CAA67178.1; -.
EMBL, AL121963; CAB87590.1; -.
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28.5%;
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MIM; 156500;
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                                                                                                                                                                                                                                                                                                                                                                                         List SEQUENCE FROM N.A.
Sheppard P.O., Humes J.M.;
"Homo sapiens complement-clq tumor necrosis factor-related protein.";
Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  --KGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAFMASLATHFSNQNSGIIFSSVETN 143
                             163 YFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM 222
                                               537 TPLVSANQGVTGMPVSAFTVILSKAYPAIGTPIPFDKILYNRQQHYDPRTGIFTCQIPGI 596
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RELATED PROTEIN 5.
COLLAGEN-LIKE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CQT5_HUMAN STANDARD; PRT; 243 AA.
QQBXG10, QQUEX4;
15-JUN-2002 (Rel. 41, Last sequence update)
15-JUN-2002 (Rel. 41, Last sequence update)
Complement-clq tumor necrosis factor-related protein 5 precursor.
CQMplement-clq tumor necrosis factor-related protein 5 precursor.
                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19.3%; Score 264.5; DB 1; Length 243; 32.6%; Pred. No. 2e-15; Live 35; Mismatches 93; Indels 25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-Uterus;
Ottenwaelder B., Obermaier B., Mewes H.-W., Gassenhuber J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: CONTAINS 1 COLLAGENOUS DOMAIN.
-!- SIMILARITY: CONTAINS 1 C1Q DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7CCDA65CDA7EB784 CRC64;
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                                                                                            223 GN---GALHGDHQRFSTFAGFLL 242
                                                                                                             EMBL, AL110261; CAB53702.1; Genew, HGNC:1434; CIQTNFS. InterPro: IPR001073; Clq. InterPro: IPR001073; Clq. InterPro: IPR0386; Clq: I. Pfam; PF01391; Collagen: Pro! PF01391; Collagen: PRINTS; PR00007; COMPLEMNTC10.
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74; Conservative
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243
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74;
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Collagen; S
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                                                                                                  200 KSDTSSNHAVLKLAKGDEVWLRMGNG---ALHGDHQRFSTFAGFLLF 243
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Run on:

Sequence:

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Database

Result

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MEDINE-21264842; PubMed-11071891;
MEDINE-21264842; PubMed-11071891;
MEDINE-21264842; PubMed-11071891;
MEDINE-21264842; PubMed-11071891;
Medecular cloning and characterization of a novel gene, CORS26,
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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09ES30;
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Collagenous repeat-containing sequence of 26kDa protein.
CORS OR CORS26.
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26828 MW; 42A481B3E9F48F7E CRC64;
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            GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lotal number of hits satisfying chosen parameters:
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Maximum Match 100%
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Match 1
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NCBI_TaxID=9913;
                          93 GPRGER----
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Matches
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Q95JD7
ID Q95JI
AC Q95JI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10 MISWVLLAC-ALP---CAADPMLGAFARRDFQKGGPQLVCS------LPGPQGPP 54
                                   PPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120
        61 PPGIPGNHGNNGNNGATGHEGARGERGDKGDLGPRGERGQHGPKGEKGYPGVPELQIAF 120
                           MASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYV 180
                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 294;
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                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 313; DB 11;
Pred. No. 3.8e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41; Mismatches
                                                                                                                                   294 AA
                                                                                                                                                 Created)
                                                                                                                                                                                                                           STRAIN=C57BL/6J; TISSUE=PANCREAS; MEDLINE=21085660; PubMed=11217851;
                                                                                                                                    PRT;
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InterPro; IPR000087; Collagen.
                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PR00007; COMPLEMNTCLQ.
SMART; SM00110; C1Q; 1.
PROSITE; PS01113; C1Q; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             22.9%;
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01-JUN-2001 (TrEMBLrel. 17,
01-JUN-2001 (TrEMBLrel. 17,
1810033805R1k protein.
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Pfam; PF01391; Collagen; 2.
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                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                   (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 294 AA;
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                                                                                                                                                                                                        NCBI_TaxID=10090;
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241 LLFETK 246
                                                                                     241 LLFETK 246
                                                                                                                                                                                    Mus musculus
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MEDLINE-21369933; PubMed-11382781;
MEDLINE-21369933; PubMed-11382781;
Sato C., Yasukawa Z., Honda N., Matsuda T., Kitajima K.;
Sato C., Yasukawa Z., Honda N., Matsuda T., Kitajima K.;
Identification and Adipotyte Differentiation-dependent Expression of the Unique Disialic Acid Residue in an Adipose Tissue-specific Glycoprotein, Adipo Q.;
J. Biol. Chem. 276:28840-28856(2001).
EMBL, AF269230, AAK58902.1;
InterPro: IPR001073; Clq.
InterPro: IPR001073; Clq.
Pfam. PF00386; Clq.
Pfam. PF01391; Collagen; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -GQHGPKGEKGYPGIP-----PELQIAFMASLATHFSNQNS 133
                                                                                                                                                                      134 GIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM----KHEDVEEVYVYLMHNGNTVF 190
                                                                                                                                                                                                                  175 PIKFDKILMNEGGHYNASSGKFVCSVPGIYYFTYDITLANKH-----LAIGLVHNGQ--Y 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44 HGDYSFRGYQGPPGPPGP----PGIPGNHGNNGNNGATGHEGAKGEKGDKGD---LGPR 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 191 SMYSYEMK-GKSDTSSNHAVLKLAKGDEVWLRM----GNGALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                             143 NIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Adipose tissue-specific protein adipo Q.
Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovinae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prodom; PD000007; Collagen; 1.
PROSITE; PS01113; C1Q; UNKNOWN_1.
SEQUENCE 240 AA; 26091 MW; C6253BA803B9A668 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21.9%; Score 299; DB 6; 33.3%; Pred. No. 5.4e-19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   243
GPPGIPGNHGNNGNNGATGHEGAKGEKGDKGD
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Les 75; Conserv
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Gaps

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51 GYQGPPGPPGPPGIPGNHGNNGANGATGHEG--AKGEKGDKGDLGP-----RGERGQHG 102
                                                                                                                                                                                                                                                                       103 PKGEKGYPG--IPPELQIAFMASLATHFSNQNSGII-------F 137
                                                                                                                                                                                                                                                                                                                               138 SSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEM 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75 GATGHEGAKGEKGDKGDLGPRGERGQ-----HGPKGE----KGYPGIPPELQIAFMAS 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124 LATHES--NQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVY 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182 LMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGFL 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20.0%; Score 273; DB 4; Length 1077;
29.6%; Pred. No. 7e-16;
.lve 43; Mismatches 90; Indels 38; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34 GLPPDCSKCCHGDYS----FRGYQGPP-------GPPGPPGIPGNHGNNGNN 74
                                                                                                                                                                                                                                    510 PPGPPGPPGOAVPPE---GFVKEGORAFVSANGGVTGMPVSAFTVILSKAYPAIGAPIPF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Busaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                           41;
                                                                                                                                                               675;
                                                                                                                                                         20.2%; Score 276.5; DB 6; Length 32.0%; Pred. No. 1.9e-16; 1.ve 27; Mismatches 87; Indels
                                                                                                                                                                                                                                                                                                                                                                                       198 KGKSDTSSNHAVLKLAKGDEVWLRM---GNGALHGDHQRFSTFAGFLL 242
                                                                                                                                                                                                                                                                                                                                                                                                        Aerbajinal W., Miller J.L.;
Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AY074490; AAL71549.1; -
SEQUENCE 1077 AA; 120974 WW; 2B8BBF3C47D032D6 CRC64;
                                                                                                                               26397B10310383F9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT; 1077 AA
                        Pfam; PF00386; C1q; 1.
Pfam; PF01391; Collagen; 8.
PRINTS; PR00007; COMPLEMNTC1Q.
ProDom; PD000007; Collagen; 2.
SMART; SM00110; C1Q; 1.
PROSITE; PS01113; C1Q; 1.
                                                                                                                              675 AA; 65447 MW;
             InterPro; IPR000087; Collagen
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es 72; Conserv
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SEQUENCE FROM N.A.
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                                                                                                               Collagen.
                                                                                                                               SEQUENCE
                                                                                                                                                           Query Match
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Q8TE71;
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Matches
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MEDLINE-21232234; PubMed-11334417;
Hotta K., Funahashi T., Bodkin N.L., Ortmeyer H.K., Arita Y.,
Hotta K., Funahashi T., Bodkin N.L., Ortmeyer H.K., Arita Y.,
Hansen B.C., Matsuzawa Y.;
T. Circulating concentrations of the adipocyte protein adiponectin are
decreased in parallel with reduced insulin sensitivity during the
T. Progression to Type 2 diabetes in rhesus monkeys.";
Diabetes 50:1126-1133(2001).
REMBL; AF404407; AAK92202.1;
RILEPTO: IPRO10073; C1G.
RILEPTO: IPRO10087; Collagen.
R Pfam; PF00386; C1g; 1.
RPGm; PF00386; C1g; 1.
RPGm; PF00386; C1g; 1.
RPGm; PF003007; Collagen.
R PROSTTE; PS01113; C1O; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              53 QGP----PGPPGP-----PGIPGNHGNNGATGHEGAKGEKGDKGD----LGPRGERGQ 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101 ---HGPKGEKGYPGI-----PPE----LQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148 FDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNH 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-21015405; PubMed-11130976; Nielsen V.H., Bendixen C., Arnbjerg J., Sorensen C.M., Jensen H.E., Shukri N.M., Thomsen B.; "Abnormal growth plate function in pigs carrying a dominant mutation in type X collagen.";
                                                                                            Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                             Length 243;
                                                                    Macaca mulatta (Rhesus macaque).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                     / Match 21.5%; Score 293.5; DB 6; Length Local Similarity 34.1%; Pred. No. 1.7e-18; nes 75; Conservative 37; Mismatches 77; Indels
                Last sequence update)
Last annotation update)
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Last annotation update)
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      Created)
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EMBL; AF222861; AAF37271.1; -.
InterPro; IPR001073; C1q.
 (TrEMBLrel. 19, C
(TrEMBLrel. 19, L
(TrEMBLrel. 21, L
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                                                                                                                  Cercopithecinae; Macaca
NCBI_TaxID-9544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                           TISSUE-ADIPOSE TISSUE;
                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Type x collagen.
             01-DEC-2001
01-JUN-2002
                                            Adlponectin.
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q9N178
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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g
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us-09-931-836-2.rspt

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OSTEJ5
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                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-SPRAGUE-DAWLEY;

XR MEDLINE-20310874; PubMed-10853827;

XR MEDLINE-20310874; PubMed-10853827;

XR MEDLINE-20310874; PubMed-10853827;

A Saifert M.F., MacKay C.A., Mason-Savas A., Popoff S.E.;

Seifert M.F., MacKay C.A., Mason-Savas A., Popoff S.E.;

The condition of formation in toothless (osteopetrotic) rats:

Int. J. Dev. Biol. 44:309-316(2000).

REMBL; AJ131848; CAA10518.1; -..

REMBL; AJ131848; CAA10518.1; -..

REMBL; AJ131848; CAA10518.1; -..

REMBL; AJ131848; CAA10518.1.

REMBL; PRO0386; C19, 1.

REMBL; PRO0386; C19, 1.

REMBL; RRO0386; C19, 1.

REMBL; RRO0110; COMPLEMNTC1Q.

REMART; SMO0110; C10, 1.

REMBL; RRO0110; C10, 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GNTVFSMYSYE--MKGKSDTSSNHAVLKLAKGDEVWLRMGN---GALHGDHQRFSTFAGF 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  126 THFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHN 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              175 KAYPAVGAPIPFDEILYNRQQHYDPRSGIFTCKIPGIYYFSYHI--HVKGTHVWVGLYKN 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45 GDYSFRGYQGPPGPPGPPGIPGNHGNNGATG-----HEGAKGEKGDKGDLGPR---G 96
                                                                                                                                                                                                                                                                       кагсиs norvegicus (кат).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Formo sapiens (Human).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19.8%; Score 270; DB 11; Length 295; 30.2%; Pred. No. 2.8e-16; Live 34; Mismatches 87; Indels 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
CDNA: FLJ22569 fis, clone HSI02142 (Hypothetical 17.6 kDa protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NON_TER 1 1
SEQUENCE 295 AA; 30012 MW; FF43B1548028813E CRC64;
                                                                                                                                                                              Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        158 AA
                                                                                                                  295 AA
                                                                                                                                                              Created)
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                                                                                                                                                                                       ol-JUN-2002 (TrEMBLrel. 21, Last an Collagen alpha 1 type X (Fragment).
                                                                                                                                                           10,
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                                                                                                                  PRELIMINARY;
                                                                                                                                                              01-MAY-1999 (TrEMBLrel.
                                                                                                                                                                                  (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10116;
         1074 LYQ 1076
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LV 292
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                                                                                                                                                                                  01-MAY-1999
01-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    115
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Q9H667
                                                                         RESULT 7
Q9Z1K4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
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                                                                                                                       SOOR DRAW REPRESENTED THE SOOR OF THE SECOND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               109 YPGIPPELQIAFMASLATHFS--NQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFT 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45 GDYSFRGYQGPPGPPGPPGIPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGE-----R 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 YP-LPQQMRVAFSAARTSNLAPGTLDQPIVFDLLLNNLGETFDLQLGRFNCPVNGTYVEI 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=SPLEEN;
Jikuya H., Takano J., Nomura N., Kikuno R., Nagase T., Ohara O.;
"The nucleotide sequence of a long cDNA clone isolated from human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        167 FSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 158;
                                                 SEQUENCE FROM N.A.

TISSUE-SMALL INTESTINE;
Watanabe K., Kumagai A., Itakura S., Yamazaki M., Tashiro
Suzuki I., Obayashi M., Nishi T., Shibahara T., Tanaka T.,
Makanura T., Isoqai T., Sugano S.,
"NEDO human cDNA sequencing project.";
submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _romitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AR074129; BAB84955.1; -.
NON_TER 1 1
SEQUENCE 705 Aa; 67430 MW; 07DB85A65A948ED3 CRC64;
                                                                                                                                                                                                                                                                                                                    Strausberg R.;
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AR026222; BAB15398.1; -.
InterPro; IPR001073; C1q.
Pfam; PF00386; C1q; 1.
PRINTS, PR00007; COMPLEMNTC1Q.
SMART; SM00110; C1Q; 1.
PROSITE; PS01113; C1Q; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         al protein.
158 AA; 17625 MW; 47DB10EDD6DC9760 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
FLJ00201 protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 19.5%; Score 266.5; DB 4; Best Local Similarity 37.0%; Pred. No. 2.7e-16; Matches 51; Conservative 36; Mismatches 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      227 LHGDHQRFSTFAGFLLFE 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140 IYGSSWKYSTFSGYLLYQ 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human)
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Best Local Similarity
Matches 79; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                              TISSUE=UTERUS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hypothetical
SEQUENCE 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q8TEJ5;
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Local Similarity
                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                               TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
       g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
                             521 GPPGPPGPPGAPGAPGAFDETGIAGLHLPNGGVEGAVLGKGGKPOFGLGELSAHATPAFT 580
                                                                             122 ASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSWMKHEDVEEVYVY 181
                                                                                                                                                                                                    ----PELQI------AFM 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 ASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVY 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HGNNGNNGATGHEGAKGEKGDKGDLGPRGE---RGQHGPKGEKGYPG---IPPELQIAFM 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 LLALFFLPFCLCQDEYMESPQTGGLPPDCSK---CCHGDYSFRGYQGPPGPPGPPGIPGN 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 LLALLILGLV-----SGSPPLDDNKIPSLCPGQ---PGLPGHGSQGLPGR 49
                                                                                                                                                                         LMHNGNTVFSMYSYE--MKGKSDTSSNHAVLKLAKGDEVWLRM----GNGALHGDHQRFS
                                                                                                          Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Similar to DKFZP586B0621 protein (Hypothetical 25.4 kDa protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  110 RSESRVPPPADTPLPFDRVLLNEQGHFDPTTGKFTCQVPGVYYFAV----HATVYRASLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               --LMHNGNTVFSMYSYEMKG--KSDTSSNHAVLKLAKGDEVWLRMGNG---ALHGDHQRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 11; Length 243;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch
1 Similarity 32.5%; Score 257.5; DB 11; Length
1 Similarity 32.5%; Pred. No. 2.9e-15;
81; Conservative 33; Mismatches 100; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strausberg R.;
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg R.;
Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC023068; AAH23068.1; -.
EMBL; BC025174; AAH25174.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hypothetical protein.
SEQUENCE 243 AA; 25420 MW; 498129CD051DB97B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         744 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
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01-DEC-2001 (TrEMBLrel. 19,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 81; Conserval
                                                                                                                                                                                                                                                                     TFAGFLLFET 245
                                                                                                                                                                                                                                                                                                SFSGFLLCPT 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             235 STFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      !!!:!!!::
STFSGFLVY 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                    Q8R002
                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
048002
DD 048000
DT 01-JU
DT 
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C STAIN—C37BL/6J; TISSUE-KIDNEY;
XX SEQUENCE FROM N.A.
XX ARIN—C37BL/6J; TISSUE-KIDNEY;
XX ARIN—C3085660; PubMed-11217851;
XX Arawad J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishili Y.,
XX Arawad T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
XX Alawad T., Hara M., Nishil K., Kiyosawa H., Kondo S., Yamanaka I.,
XX Alawad K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
XX Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
XX Radota K., Matsuda H.A., Ashburner M., Patalov S., Casavant T.,
XX Radota K., Matsuda H.A., Ashburner M., Ratalov S., Casavant T.,
XX Radota K., Matsudo I., Fasula H.,
XX Radota K., Matsudo I., Pesole G., Quackenbush J.,
XX Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
XX Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
XX Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGN- 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  664 AYHV--HCKGGNVWVALFKNNEPVMYTYDEYKKGFLDQASGSAVLLLRPGDRVFLQMPSE 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         34 GLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNG-----NNGATGHEGAKGE 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----AFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGREGAPVSGVYFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604 KKGKNGGPAYEMPAFTAELTAPFPPVGAPVKFNKLLYNGRONYNPOTGIFTCEVPGVYYF
                                                                                             Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86 KGDKGDLGPRGERGQHGPKGEKGYPGIP-------PELQI------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 744;
                                                                                                                                                                                                                               Strausberger, Strausberger, Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases. Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases. InterPro; IPR001073; C19.

InterPro; IPR001073; C19.

InterPro; IPR001087; Collagen. Pfam; PF00186; C19; I. Pfam; PF00186; C19; I. Pfam; PF00180; C118gen; 7. ProDom; PD000007; Collagen; 7. ProDom; PD000007; Collagen; 7. ProDom; PD00113; C10; UNKNOWN_I. Collagen; Hypothetical protein.
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical 73.4 kDa protein.
Hymo saptens (Human).
Eukaryota; Metasoa; Chordata; Craniata; Vertebrata; Eutelomannia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Procollagen, type VIII, alpha 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26; Mismatches 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 257.5; DB 4
Pred. No. 1.1e-14;
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722 QAAGLYAGQYVHSSFSGYLLY 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 225 -- GALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18.8%;
29.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78; Conservative
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Length 744;

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Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L., Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S., Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             --- AFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFT 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   605 KGKHGGPAXEMPAFTAELTVPFPPVGAPVKFDKLLYNGRONYNPQTGIFTCEVPGVYYFA 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGN-- 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 665 YHV--HCKGGNVWVALFKNNEPMMYTYDEYKKGFLDQASGSAVLLLRPGDQVFLQMPSEQ 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                       34 GLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGANGATGHEGA-----KGE 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mu
NCBI_TaxID=10030;
                                                                                                                                        nayasuzaan ii,
Punctional annotation of a full-length mouse cDNA collection.";
Nature 409:685-590(2001).
EMBL; AKO18742; BAB31383.1; -.
EMBL; AKO18742; BAB31383.1; -.
EMBL; AKO18742; CO1841.
InterPro; IPR001073; C.1q; 1.
Fram; PP01386; C.1q; 1.
Fram; PP01391; Collagen.
Fram; PR01391; Collagen. 7.
PRINTS; PR00007; COMPLENNTC1Q.
SNRAT; SM00110; C.1Q; 1.
SNRAT; SM01110; C.1Q; 1.
SRAPT; SN01113; C.1Q; 1.
SRAPT; SN01113; C.1Q; 1.
SRQUENCE 744 AA; 73581 MW; C659BDCCBCD6EB9C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                        54;
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                                                                                                                                                                                                                                                                                                                                                                     Length 744;
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Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC011061; AAH11061.1; -
InterPro; IPR001073; C19.
InterPro; IPR000087; Collagen.
Pfam; PF00386; C19; 1.
Pfam; PF01391; Collagen; 7.
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Procellagen, type VIII, alpha 1.
                                                                                                                                                                                                                                                                                                                                                                       18.8%; Score 257; DB 11; 29.6%; Pred. No. 1.2e-14; iive 27; Mismatches 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        744 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGLYAGOYVHSSFSGYLLY 742
                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 29.64
Matches 77; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            --HGPKGEKGYPGIPPEL-----QIAFMASLATHFSNQNSGIIFSSVETNIGNFF 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 GVTGVEGPRGFPGTPGTRGEPGESAYVHRSAFSVGLESRITVPNVPIRFTKIFYNLONHY 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         54 GP----PGPPGP----PGIPGNHGNNGATGHEGAKGEKGDKGD---LGPRGERGQ- 100
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                                                                                                                                       545 PGKPGALGPQGQPGLPGPPGPPGPPGPPAVMPTPSPQGEYLPDMGLGIDGVKPPHAYAGK 604
                                                                                                                                                                      -----AFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFT 166
                                                                                                                                                                                                                               167 FSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGN-- 224
                                                                                                                                                                                                                                                665 YHV--HCKGGNVWVALFKNNBPMYTYDEYKKGFLDQASGSAVLLLRPGDQVFLQMPSEQ 722
                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
NCBI_TaxID=9615;
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Kabir M., Ananthnarayan S., Ionut V., Kim S.P., Van Citters G.W.,
Dea M.K., Bergman R.N.;
Dea M.K., Bergman R.N.;
Bergulation of Adiponectin gene expression in the fat-fed dog.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
BERBL; AR41206; AAL09702.1;
InterPro; IPR001073; Coliagen.
                                                                                                                                                                                                KGKHGGPAYEMPAFTAELTVPFPPVGAPVKFDKLLYNGRONYNPQTGIFTCEVPGVYYFA
                          54;
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                                                    34 GLPPDCSKCCHGDYSFRGYQGPPGPPGPPGIPGNHGNNGANGATGHEGA---
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
18.1%; Score 247.5; DB 6;
Best Local Similarity 30.9%; Pred. No. 1.7e-14;
Matches 60; Conservative 36; Mismatches 71;
18.8%; Score 257; DB 11; 29.6%; Pred. No. 1.2e-14;
                                                                                                                                                                                                                                                                                                                                                                                               194 AA
                             27; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
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                                                                                                                     86 KGDKGDLGPRGERGQHGPKGEKGYPGIP-
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Pfam; PF01391; Collagen; 1.
ProDom; PD000007; Collagen; 1.
PROSITE; PS01113; ClQ; UNKNOWN_1.
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723 AAGLYAGQYVHSSFSGYLLY 742
                                                                                                                                                                                                                                                                                              -GALHGDHQRFSTFAGFLLF 243
                                                                                                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel. 19, C
(TrEMBLrel. 19, I
(TrEMBLrel. 21, I
                              77; Conservative
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                  Similarity
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SEQUENCE
    Query Match
Best Local
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                                 Matches
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RY STRAIN-C57BL/63; TISSUE-KIDNEY;
RX MEDLINE-21085660; PubMed-11217851;
RAMAI J., Shinagawa A., Sibata K., Yoshino M., Itoh M., Ishii Y.,
RA Araka T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
A Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Satto T., Okazati Y., Gojobori T., Bono H., Rasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Baladov S., Osasvant T.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Ouackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
Branstein M.J., Bult C., Fletcher C., Fullita M., Wagner L.,
RA Brownstein M.J., Bult C., Fletcher C., Fullita M., Manbaerts P.,
RA Brownstein M.J., Hofmann M., Hume D.A., Kamiga M., Lee N.H.,
RA Jyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Sakai H., Sato K., Schoebbach C., Seya T., Shbata Y., Storch K.-F.,
Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Willaning L.,
RA Hynshaw-Boris A., Yoshida K., Rawaji H., Kohtsuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7;
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Sukaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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Strausberg R.;
Submitteed (JAN-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AK00365; BAB22262.1;
EMBL; AK00365; AAH02086.1;
MOD; MXI:88223; C1qa.
InterPro; IPR001073; C1q.
InterPro; IPR001073; C1q.
InterPro; IPR001073; C1lagen.
Pfam; PF001991; Collagen.
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Pfam; PF01191; Collagen; I.
PRINTS; PR00007; COMPLEMNTC1Q.
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
complement component 1, q subcomponent, alpha polypeptide.
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SEQUENCE 245 AA; 25974 MW; 41C2066D49592020 CRC64;
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Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              118974 seqs, 19401057 residues
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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7	1367	100.0	246	12	115-10-036-342-2	∢ ,	
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US-09-993-687-47	US-09-989-734-47	0 US-09-989-722-47	0 US-09-989-723-47	0 US-09-989-27-47	77-102-086-50-SII 0	77-12-08-08-01 U	7 TC	77 307 00 00 00 0	/ \$-5/0-166-60-00 0	U US-08-880-442-47	0 US-09-991-163-47	0 US-09-993-604-47	0 US-09-990-456-47	0 US-09-989-721-47		9 6	-66/-60-50	US-09-911-176B-3	US-09-854-133-185	0 US-09-738-973-185	US-09-944-413-42	US-09-944-403-42	CV-964-84-811	0 1 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	79-556-556-67	US-09-944-907-42	US-09-944-929-42	US-10-028-072-362	
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21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3		2.1.0	21.3	21.3	21.3	21.3	21.3	21.0	7.17	71.0	20.0	20.0	19.3	19.3	19.3	10		19.3	19.3	19.3	
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Sequence 2, Application US/10036041 Publication No. US/20020192751A1 GENERAL INFORMATION: APPLICANT: Stewart, Timothy A. APPLICANT: Watanabe, Colin K. APPLICANT: Wood, William I. APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Goddard, Audrey,
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L. Pan, James Stewart, Timothy US-10-036-041-2

ALIGNMENTS

APPLICANT: WOOG, WILLIAM I.

APPLICANT: AMOOG, WILLIAM I.

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REPERBENCE: P3030R16B

CURRENT APPLICATION NUMBER: U5/10/036,041

CURRENT FILING DATE: 2001-12-26

PRIOR PAPLICATION NUMBER: 60/115514

PRIOR PELING DATE: 1998-05-15

PRIOR PELING DATE: 1998-12-15

PRIOR PAPLICATION NUMBER: 60/113300

PRIOR PELING DATE: 1998-12-22

PRIOR PELING DATE: 1998-12-23

PRIOR PILING DATE: 1999-12-33

PRIOR PILING DATE: 1999-10-12

PRIOR APPLICATION NUMBER: 60/116843

PRIOR PILING DATE: 1999-01-12

PRIOR PILING DATE: 1999-01-22

FILING DATE: 1999-03-23 APPLICATION NUMBER: 60/125778 FILING DATE: 1999-03-23 PRIOR

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PRIOR AFPLICATION NUMBER: 09/10200
PRIOR PILING DATE: 1999-10-29
PRIOR PELICATION NUMBER: 09/311832
PRIOR FILING DATE: 1999-06-14
PRIOR PELICATION NUMBER: 09/380142
PRIOR APPLICATION NUMBER: 09/44448
PRIOR PELING DATE: 1999-08-25
PRIOR PELING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-3-20
PRIOR PELICATION NUMBER: 09/816744
PRIOR PELING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: 09/816744
PRIOR PELING DATE: 2010-05-10
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FILING DATE: 2000-08-24
APPLICATION NUMBER: PCT/USO0/32678
FILING DATE: 2000-12-01
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APPLICATION NUMBER: PCT/US00/34956
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PRIOR APPLICATION NUMBER: PCT/USO0/05841
PRIOR FILING DATE: 2000-03-02
PRIOR APPLICATION NUMBER: PCT/USO0/14042
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APPLICATION NUMBER: PCT/US00/15264
FILING DATE: 2000-06-02
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PRIOR FILLING DATE: 1999-12-22
PRIOR APPLICATION NUMBER: PCT/US00/05601
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APPLICATION NUMBER: PCT/US99/28551
FILING DATE: 1999-12-02
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R PALLING DATE: 1999-04-27

R APPLICATION NUMBER: 60/131291

R APPLICATION NUMBER: 60/131291

R FILING DATE: 1999-04-27

R APPLICATION NUMBER: 60/132371

R PILLING DATE: 1999-05-04

R APPLICATION NUMBER: 60/132379

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R APPLICATION NUMBER: 60/144791
R FILING DATE: 1999-07-20
R PILING DATE: 1999-08-03
R FILING DATE: 1999-08-03
R APPLICATION NUMBER: 60/162506
R APPLICATION NUMBER: 60/125826

R FILING DATE: 1999-03-24

R APPLICATION NUMBER: 60/127035

R FILING DATE: 1999-03-31

R APPLICATION NUMBER: 60/127706

R FILING DATE: 1999-04-05

R FILING DATE: 1999-04-13

R APPLICATION NUMBER: 60/130359

R RILING DATE: 1999-04-21

R APPLICATION NUMBER: 60/130359

R RILING DATE: 1999-04-21

R APPLICATION NUMBER: 60/131270

R FILING DATE: 1999-04-27
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                                                         PRIOR ```

APPLICANT: GUGUMANT, FORLER
APPLICANT: GUGUMANT, FORLER
APPLICANT: Pan, James
APPLICANT: Rewart, Timoth A.
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Janay, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: 2001-12-26
CURRENT FILING DATE: 2001-12-26
CURRENT FILING DATE: 1998-05-15
PRIOR PLILNG DATE: 1998-05-15
PRIOR FILING DATE: 1998-12-15
PRIOR FILING DATE: 1998-12-22
PRIOR FILING DATE: 1998-12-22
PRIOR FILING DATE: 1998-12-22
PRIOR FILING DATE: 1998-12-23
PRIOR FILING DATE: 1998-12-23
PRIOR FILING DATE: 1998-12-23 121 MASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYV 180 Gaps Length 246; Indels 100.0%; Score 1367; DB 9; 100.0%; Pred. No. 1e-111; tive 0; Mismatches 0; PRIOR FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: PCT/USO1/06520
PRIOR APPLICATION NUMBER: PCT/USO1/06520
PRIOR APPLICATION NUMBER: PCT/USO1/17800
PRIOR FILING DATE: 2001-06-01
PRIOR FILING DATE: 2001-06-10
PRIOR PILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: PCT/USO1/21066
PRIOR APPLICATION NUMBER: PCT/USO1/21735
PRIOR PILING DATE: 2001-06-29
PRIOR PILING DATE: 2001-06-29
PRIOR PILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-36
PRIOR FILING DATE: 2001-06-36
PRIOR FILING DATE: 2001-06-36
PRIOR FILING DATE: 2001-07-09 FILING DATE: 2000-12-20
APPLICATION NUMBER: PCT/US01/06520
TITING DATE: 2001-02-28 RESULT 2
US-10-036-342-2
Sequence 2, Application US/10036342
; Patent No. US2002009681A1
; GENERAL INFORMATION:
; APPLICANT: Desnoyers, Luc Best Local Similarity 100. Matches 246; Conservative Goddard, Audrey Godowski, Paul TYPE: PRT; ORGANISM: Homo Sapien US-10-036-041-2 241 LLFETK 246 |||||| 241 LLFETK 246 APPLICANT: APPLICANT: APPLICANT: LENGTH: 246 Query Match a g ò δy q δy g δ g δy

APPLICATION NUMBER: PCT/US99/10733
FILING DATE: 1999-05-14
APPLICATION NUMBER: PCT/US99/28551
FILING DATE: 1999-12-02
APPLICATION NUMBER: PCT/US99/30720 FILING DATE: 1999-12-22 APPLICATION NUMBER: PCT/US00/05601 FILING DATE: 2000-03-01 APPLICATION NUMBER: PCT/US00/05841 PRIOR APPLICATION NUMBER: 60/113621
PRIOR FILING DATE: 1998-12-23
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PRIOR PELING DATE: 1998-12-23
PRIOR PELING DATE: 1999-01-12
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PRIOR PELING DATE: 2001-05-07
PRIOR PELING DATE: 2001-06-05
PRIOR PELICATION NUMBER: 09/81450
PRIOR PELING DATE: 2001-06-05
PRIOR PELICATION NUMBER: 09/80599
PRIOR PELING DATE: 2001-06-05
PRIOR PELICATION NUMBER: 09/906-827
PRIOR PELICATION NUMBER: 00/909-827
PRIOR PELICATION NUMBER: 00/909-82

Sequence 4, Application US/09776976

Sequence 4, Application US/09776976

Patent No. US20020037849A1

GENERAL INFORMATION:

APPLICANT: Fruebis, Joachim

APPLICANT: Fruebis, Joachim

APPLICANT: Fruebis, Joachim

TITLE OF INVENTION: OBG3 GLObular Head and Uses Thereof for Decreasing Body Mass

FILE REFERENCE: 76.043.REG

CURRENT APPLICATION NUMBER: US/09/776,976

CURRENT APPLICATION NUMBER: US 09/758,055

PRIOR APPLICATION NUMBER: US 60/176,28

PRIOR FILING DATE: 2001-01-0

PRIOR APPLICATION NUMBER: US 60/198,087 PPGIPGNHGNNGANGATGHEGAKGEKGDKGDLGPRGERGQHGPKGEKGYPGIPPELQIAF 120 Gaps 1 MLWRQLIYWQLLALFFLPFCLCQDEYMESPQTGGLPPDCSKCCHGDYSFRGYQGPPGPPG 60 181 YLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRMGNGALHGDHQRFSTFAGF ö Length 246; Indels 100.0%; Score 1367; DB 12; 100.0%; Pred. No. 1e-111; tive 0; Mismatches 0; PRIOR APPLICATION NUMBER: PCT/VS00/14042
PRIOR FLING DATE: 2000-05-22
PRIOR FLING DATE: 2000-06-22
PRIOR FLING DATE: 2000-06-02
PRIOR PLING DATE: 2000-06-02
PRIOR PLING DATE: 2000-08-23
PRIOR PLING DATE: 2000-08-24
PRIOR PLING DATE: 2000-08-24
PRIOR PLING DATE: 2000-12-01
PRIOR PLING DATE: 2001-06-01
PRIOR PLING DATE: 2001-06-20
PRIOR APPLICATION NUMBER: PCT/US01/1365
PRIOR PLING DATE: 2001-06-20
Query Match Best Local Similarity 100. Matches 246; Conservative TYPE: PRT ORGANISM: Homo Sapien US-10-036-342-2 ||||||| ||LFETK 246 LLFETK 246 SEQ ID NO 2 LENGTH: 246 241 241 ò g ò g ò g à a ò q

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227 LHGDHQRFSTFAGFLLF 243
 |: |: || || || || || || || || || || LYADNVNDSTFTGFLLY 243
 TYPE: PRT
CORGANISM: mus musculus
US-09-909-547-4
 NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patent.pm
 RESULT 6
US-09-911-176B-48
 116
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 APPLICANT: Elickson, Mary Ruth
APPLICANT: Elickson, Mary Ruth
APPLICANT: Erickson, Mary Ruth
APPLICANT: Erickson, Mary Ruth
APPLICANT: Erickson, Mary Ruth
APPLICANT: Bihain, Bernard
TITLE OF INVENTION: 0863 Globular Head and Uses Thereof for Decreasing Body Mass
FILE REPERENCE: 76.US4.REG
CURRENT APPLICATION NUMBER: US 6097758, 055
CURRENT APPLICATION NUMBER: US 60/176,228
PRIOR APPLICATION NUMBER: US 60/176,228
PRIOR FILING DATE: 2000-01-14
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-09-01
PRIOR FILING DATE: 2000-09-01
SOFTWARE: Patent.pm
SSOTUM: APPLICATION NUMBER: US 60/299,881
 6
 6
 64 IPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGER----GQHGPKGEKGYPGIPPE---- 115
 64 IPGNHGNNGNNGATGHEGAKGEKGDKGDLGPRGER---GQHGPKGEKGYPGIPPE---- 115
 116 ----LQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM 170
 109 EAAYMYRSAFSVGLETRVIVPNVPIRFTKIFYNQQNHYDGSTGKFYCNIPGLYYFSYHIT 168
 KHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG---A 226
 169 VY--MKDVKVSLFKKDKAVLFTYDQYQEKNVDQASGSVLLHLEVGDQVWLQVYGDGDHNG 226
 6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYQGPPGPPG 63
 49 HPGHNGTPGRDGTPGERGERGERGERGAGILGPRGETGDVGMTGAEGFRGFPGTPGRRGEPG 108
 Gaps
 6 LIYWOLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYQGPPGPPGF 63
 Length 247;
 Length 247;
 Indels
 Indels
 21.5%; Score 294; DB 10;
31.5%; Pred. No. 1.5e-18;
iive 40; Mismatches 102;
 21.5%; Score 294; DB 10;
31.5%; Pred. No. 1.5e-18;
ive 40; Mismatches 102;
 PRIOR FILING DATE: 2000-04-13
PRIOR APPLICATION NUMBER: US 60/299,881
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PATENT.PM
SEQ ID NO 4
LENGTH: 247
 Sequence 4, Application US/09758055 Patent No. US20020058617A1 GENERAL INFORMATION:
APPLICANT: Fruebls, Joachim
 LHGDHQRFSTFAGFLLF 243
 L Similarity 31.59
81; Conservative
 1 Similarity 31.5
81; Conservative
 ; ORGANISM: mus musculus US-09-758-055-4
) ORGANISM: mus musculus US-09-776-976-4
 Query Match
Best Local S
Matches 81
 TYPE: PRT
 Query Match
 Best Local
Matches 8
 227
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APPLICANT: FIGURES, JOSCHIMM
APPLICANT: PETICKSON, MAYY RUth
APPLICANT: Pences
APPLICANT: Pences
APPLICANT: Bihain, Bernard
TITLE OF INVENTION: 08G3 Globular Head and Uses Thereof for Decreasing Body Mass
TITLE OF INVENTION: 08G3 Globular Head and Uses Thereof for Decreasing Body Mass
FILE REFERENCE: 76.US6.CIP
CURRENT FILING DATE: 2001-07-19
PRIOR APPLICATION NUMBER: US 09/776,976
PRIOR PILING DATE: 2001-01-10
PRIOR FILING DATE: 2001-01-10
PRIOR FILING DATE: 2000-09-01
PRIOR FILING DATE: 2000-09-01
PRIOR APPLICATION NUMBER: US 60/198,087
PRIOR FILING DATE: 2000-04-13
PRIOR APPLICATION NUMBER: US 60/198,087
PRIOR PILING DATE: 2000-04-13
PRIOR PRICATION NUMBER: US 60/176,228
PRIOR PRICATION NUMBER: US 60/176,228
PRIOR FILING DATE: 2000-01-14
 9
 169 VY--MKDVKVSLFKKDKAVLFTYDQYQEKNVDQASGSVLLHLEVGDQVWLQVYGDGDHNG 226
 109 EAAYMYRSAFSVGLETRVIVPNPIRFTKIFYNQONHYDGSTGKFYCNIPGLYYFSYHIT 168
 64 IPGNHGNNGANGATGHEGAKGEKGDKGDLGPRGER---GQHGPKGEKGYPGIPPE---- 115
 2 LILQALLFILILP-SHAEDDVTTTEELAPALVPPPKGTCA-----GWWA----GIPG 48
 6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYQGPPGPPG 63
 ----LQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM 170
 171 KHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG---A 226
 169 VY--MKDVKVSLFKKDKAVLFTYDQYQEKNVDQASGSVLLHLEVGDQVWLQVYGDGDHNG 226
HPGHNGTPGRDGRDGTPGEKGEKGDAGLLGPKGETGDVGMTGAEGPRGFPGTPGRKGEPG 108
 116 -----LQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTFSMM
 KHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG---A
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 34;
 Length 247;
 Indels
 Query Match
21.5%; Score 294; DB 10;
Best Local Similarity 31.5%; Pred. No. 1.5e-18;
Matches 81; Conservative 40; Mismatches 102;
 Sequence 4, Application US/09909547 Patent No. US20020091080A1 GENERAL INFORMATION:
APPLICANT: Fruebls, Joachim
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6

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APPLICANT: Fruebis, Joachim
APPLICANT: Fruebis, Joachim
APPLICANT: Fruebis, Joachim
APPLICANT: Fruebis, Mary Ruth
APPLICANT: Bilain, Bernard
TITLE OF INVENTION: OBG3 Globular Head and Uses Thereof for Decreasing Body Mass
FILE REFRENCE: 76.054.REC
CURRENT APPLICATION NUMBER: US 60/198,055
CURRENT FILING DATE: 2000-01-14
PRIOR APPLICATION NUMBER: US 60/198,087
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 7
SSOFWARE: Patent.pm
SEQ ID NO 6
IENGTH: 244
 148 FDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNH 207
 53 QGP----PGPPGP-----PGIPGNHGNNGNNGATGHEGAKGEKGDKGD---LGPR---GE 97
 98 RCQHGPKGEKGYPGI-----PPE----LQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
 148 FDVMTGREGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNH 207
 143 YDGSTGKFHCNIPGLYYFAYHITVY--MKDVKVSLFKKDKAMLFTYDQYQENNVDQASGS 200
 31; Gaps
 53 QGP----PGPPGP-----PGIPGNHGNNGNNGATGHEGAKGEKGDKGD---LGPR---GE 97
 DB 10; Length 244;
 78; Indels
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 208 AVLKLAKGDEVWLRM-GNG---ALHGDHORFSTFAGFLLF 243
 201 VLHLEVGDQVWLQVYGEGERNGLYADNDNDSTFTGFLLY 240
 208 AVLKLAKGDEVWLRM-GNG---ALHGDHQRFSTFAGFLLF 243
 201 VLLHLEVGDQVWLQVYGEGERNGLYADNDNDSTFTGFLLY 240
 .7e-18;
 Mismatches
 21.5%; Score 293.5;
34.5%; Pred. No. 1.7e
tive 35; Mismatches
 Sequence 6, Application US/09758055
Patent No. US20020058617A1
GENERAL INFORMATION:
 US-09-909-547-6
; Sequence 6, Application US/09909547
; Patent No. US20020091080A1
; GENERAL INPORMATION:
APPLICANT: Fruebis, Joachim
 35;
 Conservative
 Query Match
Best Local Similarity 34.5%
Matches 76; Conservative
 ; ORGANISM: Homo sapiens
US-09-758-055-6
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 JOHNSTON TELLORY STRUCTURE APPLICANT: Fruebls, Joachim APPLICANT: Fruebls, Joachim APPLICANT: Fruebls, Joachim APPLICANT: Fruebls, Joachim APPLICANT: End. Frances APPLICANT: End. Frances APPLICANT: Bihain, Bernard TITLE OF INVENTION: OBG3 Globular Head and Uses Thereof for Decreasing Body Mass TITLE OF INVENTION: OWBER: US/09/776,976
CURRENT APPLICATION NUMBER: US 09/758,055
PRIOR APPLICATION NUMBER: US 09/758,055
PRIOR APPLICATION NUMBER: US 60/176,28
PRIOR APPLICATION NUMBER: US 60/176,28
PRIOR FILING DATE: 2000-01-14
PRIOR FILING DATE: 2000-01-14
PRIOR FILING DATE: 2000-09-01
PRIOR APPLICATION NUMBER: US 60/198,087
PRIOR FILING DATE: 2000-09-01
SHIOR FILING DATE: 2000-09-01
SOFTWARE: PALENT DATE: 2000-09-01
SOFTWARE: PALENT DATE: 2000-09-01
 6
 98 RCQHGPKGEKGYPGI-----PPE----LQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
 148 FDVMTGRFGAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNH 207
 Indels 31; Gaps
 53 QGP----PCPPGP-----PGIPGNHGNNGNNGATGHEGAKGEKGDKGD---LGPR---GE 97
 Length 244;
 Length 244;
 Sequence 4.0, Apptication Us/Us/April Us/Us/April Us/April Us/Apri
 78;
 208 AVLKLAKGDEVWLRM-GNG---ALHGDHQRFSTFAGFLLF 243
 201 VLHLEVGDQVWLQVYGEGERNGLYADNDNDSTFTGFLLY 240
 DB 9;
 DB 10;
 .7e-18;
 Score 293.5; DB 1
Pred. No. 1.7e-18;
 21.5%; Score 293.5; Di
34.5%; Pred. No. 1.7e-
tive 35; Mismatches
Application US/09911176B
 Sequence 6, Application US/09776976
Patent No. US20020037849Al
GENERAL INFORMATION:
 21.5%;
34.5%;
 Query Match 21.5%
Best Local Similarity 34.5%
Matches 76; Conservative
 ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-776-976-6
 Query Match
Best Local Similarity
 ; ORGANISM: HOM-
US-09-911-176B-48
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247
 RESULT 11
US-09-758-055-2
US-09-776-976-2
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 Sequence 2, Application US/09776976

Sequence 2, Application US/09776976

Patent No. US20020037849A1

GENERAL INFORMATION:
APPLICANF Fructais, Jacchim
APPLICANF Fructais, Jacchim
APPLICANF Fartebas, Wary Ruth
APPLICANF Bernard
FILE REFERENCE: 76.US4.REG
CURRENT FILING NUMBER: US/09/776,976

FILE REFERENCE: 76.US4.REG
CURRENT FILING DATE: 2001-02-05
PRIOR FILING DATE: 2001-01-00
PRIOR FILING DATE: 2000-01-14

PRIOR APPLICATION NUMBER: US 60/196,087

PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-09-01

NUMBER OF SEQ ID NOS: 7

SEQ ID NO 2

SEQ ID NO 2

SEQ ID NO 2

SEQ ID NO 2

FENEWARE: Patent.PM
 APPLICANT: ELICKANU, MALTANICANT: APPLICANT: APPLICANT: APPLICANT: BITCANDI, MASS APPLICANT: Yen, Frances APPLICANT: Bihaln, Bernard TITLE OF INVENTION: 0863 Globular Head and Uses Thereof for Decreasing Body Mass; FILE REFERENCE: 76.USC,CIP CURRENT APPLICATION NUMBER: US/09/909,547 CURRENT APPLICATION NUMBER: US 09/776,976 PRIOR FILING DATE: 2001-07-19 PRIOR FILING DATE: 2001-03-05 PRIOR FILING DATE: 2000-09-01 PRIOR FILING DATE: 2000-09-01 PRIOR FILING DATE: 2000-09-01 PRIOR FILING DATE: 2000-04-13 PRIOR FILING DATE: 2000-04-13 PRIOR FILING DATE: 2000-04-13 PRIOR FILING DATE: 2000-04-13 PRIOR FILING DATE: 2000-01-14 SPRIOR SEQ ID NOS: 7 SOFWWARE: PATCHT.
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 83 TGVPGAEGPRGFPGIQGRKGEPGEGAYVYRSAFSVGLETYVTIPNMPIRFTKIFYNQQNH 142
 148 FDVMTGRFCAPVSGVYFFTFSMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNH 207
 98 RGQHGPKGEKGYPGI-----PPE----LQIAFMASLATHFSNQNSGIIFSSVETNIGNF 147
 53 QGP----PGPPGP-----PGIPGNHGNNGNNGATGHEGAKGEKGDKGD---LGPR---GE
 Length 244;
 21.5%; Score 293.5; DB 10; Length 34.5%; Pred. No. 1.7e-18; ive 35; Mismatches 78; Indels
 208 AVLKLAKGDEVWLRM-GNG---ALHGDHQRFSTFAGFLLF 243
 Erickson, Mary Ruth
 76; Conservative
 ORGANISM: mus musculus
 TYPE: PRT
ORGANISM: Homo sapiens
 Query Match
Best Local Similarity
Matches 76; Conserv
 RESULT 10
US-09-776-976-2
 US-09-909-547-6
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Sequence 2, Application US/09758055
; Sequence 2, Application US/09758055
; Patent No. US20020058617A1
; GENERAL INFORMATION:
APPLICANT: Fruebis, Joachim
APPLICANT: Erickson, Mary Ruth
APPLICANT: Elickson, Mary Ruth
APPLICANT: Bibain, Bernard
TITLE OF INVENTION: ORG3 Globular Head and Uses Thereof for Decreasing Body Mass
TITLE OF INVENTION: ORG3 Globular Head and Uses Thereof for Decreasing Body Mass
FILE REFERENCE: 76.054.REG
CURRENT APPLICATION NUMBER: US 60/176,228
PRIOR FILING DATE: 2000-01-14
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-04-13
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patent.pm
SEQ ID NO 2.
SEQ ID NO 2.
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 168 SMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG- 225
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 46 IPGHSGHNGTPGRDGRDGTPGEKGEKGDSGLLGPKGETGDVGMTGAEGPRGFPGTPGRKG 105
 116 -----LQIAFMASLATHFSNONSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTF 167
 166 HITYY--MKDVKVSLEKKDKAVLFTYDQYQEKNVDQASGSVLLHLEVGDQVWLQVYGDGD 223
 106 EPGEAAYVRSGFSVGLETRVIVPNVPIRFTKIFYNQQNHYDNSTGKFYCNIPGLXYFSY 165
 166 HITVY--MKDVKVSLFKKDKAVLFTYDQYQEKNVDQASGSVLHLEVGDQVWLQVYGDGD 223
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 46 IPGHSGHNGTPGRDGTPGEKGEKGDSGLLGPKGETGDVGMTGAEGPRGFPGTPGRKG 105
 6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYGGPPGPPG 63
 6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDYSFRGYGGPPGPPG 63
 106 EPGEAAYVRRSGFSVGLETRVTVPNVPIRFTKIFYNQONHYDNSTGKFYCNIPGLXYFSY
 -----LQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTF
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 40;
 40;
 Length 247;
Length 247;
 21.4%; Score 293; DB 10; Length 2'
llarity 31.2%; Pred. No. 1.9e-18;
Conservative 40; Mismatches 99; Indels
 Query Match
21.4%; Score 293; DB 10;
Best Local Similarity 31.2%; Pred. No. 1.9e-18;
Matches 81; Conservative 40; Mismatches 99;
 243
 224 HNGLYADNVNDSTFTGFLLF 243
 --ALHGDHQRFSTFAGFLLF
 ; ORGANISM: mus musculus US-09-758-055-2
 Query Match
Best Local Similarity
Matches 81; Conserv
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TILLE OF INVERTION: Secreted and Transmembrane Polypeptides and Nucleic TILLE OF INVERTION: Secreted and Transmembrane Polypeptides and Nucleic FILE REPERENCE: P273004202 CURRENT FILMS DATE: 2001-11.-49
FILE REPERENCE: P273004202 CURRENT FILMS DATE: 2001-11.-49
PRIOR PALLOKATION NUMBER: 05/09/979
PRIOR PALLOKATION NUMBER: 05/065310
PRIOR PALLOKATION NUMBER: 05/065311
PRIOR PALLOKATION NUMBER: 05/065311
PRIOR PALLOK DATE: 1937-10-17
PRIOR PALLOK DATE: 1937-10-17
PRIOR PALLOK DATE: 1937-10-17
PRIOR PALLOK DATE: 1939-10-17
PRIOR PALLOK DATE: 1939-10-10-17
PRIOR PALLOK DATE: 1939-10-17
 Godowski, Paul J.
Grimaldi, J.Christopher
Gurney, Austin L.
 FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088202
FILING DATE: 1998-06-05
APPLICATION NUMBER: 60/088212
FILING DATE: 1998-06-05
 Pan, James
Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
 Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
 Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
 Kljavin, Ivar J.
Napier, Mary A.
 Tumas, Daniel
 Fong, Sherman
 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT:
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 Sequence 2. Application US/09909547 .

Sequence 2. Application US/09909547 .

Sequence 3. Application US/09909547 .

Sequence 3. Application US/090091 .

Sequence 3. Application US/090091 .

Sequence 3. Application Sequence 3. Application Mary Ruth APPLICANT: Erickson, Mary Ruth APPLICANT: Bilain, Bernard 1 TITLE OF INVENTION: OBG3 Globular Head and Uses Thereof for Decreasing Body Mass STILE REFERENCE: 76 US6.CIP .

FILE REFERENCE: 76 US6.CIP .

CURRENT APPLICATION NUMBER: US/09/909,547 .

CURRENT APPLICATION NUMBER: US 09/776,976 .

PRIOR APPLICATION NUMBER: US 60/299,881 .

PRIOR FILING DATE: 2001-01-10 .

PRIOR FILING DATE: 2000-09-01 .

PRIOR FILING DATE: 2000-09-01 .

PRIOR FILING DATE: 2000-09-01 .

PRIOR FILING DATE: 2000-01-14 .

SEQ. ID NOS: 7 .

SEQ. ID NOS: 7 .

SEQ. ID NOS: 7 .

SED. ID NO 2.
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 64 IPGNHGNNGANGATGHEGAKGEKGDKGD---LGPRGER---GQHGPKGEKGYPGIPPE-- 115
 168 SMMKHEDVEEVYVYLMHNGNTVFSMYSYEMKGKSDTSSNHAVLKLAKGDEVWLRM-GNG- 225
 116 -----LQIAFMASLATHFSNQNSGIIFSSVETNIGNFFDVMTGRFGAPVSGVYFFTF 167
 106 EPGEAAYVYRSGESVGLETRVTVPNVPIRFTKIFYNQQNHYDNSTGKFYCNIPGLYYFSY 165
 166 HITVY--MKDVKVSLFKKDKAVLFTYDQYQEKNVDQASGSVLHLEVGDQVWLQVYGDGD 223
 Gaps
 6 LIYWQLLALFFLPFCLCQDEYMESPQTGG--LPPDCSKCCHGDXSFRGYQGPPGPPG 63
 2 LLLOALLFLLILP-SHAEDDVTTTEELAPALVPPPKGTCA-----GWMA-----G 45
 Length 247;
 Indels
 Ouery Match 21.4%; Score 293; DB 10; Best Local Similarity 31.2%; Pred. No. 1.9e-18; Matches 81; Conservative 40; Mismatches 99;
 RESULT 13
US-09-992-598-47
Sequence 47, Application US/09992598
Patent No. US20020160384A1
GENERAL INFORMATION:
APPLICANT: Baker Kevin P.
APPLICANT: Faton, David
APPLICANT: Ferrara, Napoleone
 224 HNGLYADNVNDSTFTGFLLF 243
 226 -- ALHGDHQRFSTFAGFLLF 243
 226 -- ALHGDHORFSTFAGFLLF
 ; ORGANISM: mus musculus US-09-909-547-2
 US-09-909-547-2
 TYPE: PRT
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PRIOR APPLICATION NUMBER: 60/089600
PRIOR FILING DATE: 1998-06-17
PRIOR PAPLICATION NUMBER: 60/08953
PRIOR PELING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/089801
PRIOR APPLICATION NUMBER: 60/089901
PRIOR FILING DATE: 1998-06-18
PRIOR PELING DATE: 1998-06-18
PRIOR PELING DATE: 1998-06-18
PRIOR PELING DATE: 1998-06-18
PRIOR PELING DATE: 1998-06-19
 R FILING DATE: 1998-06-24

R APPLICATION NUMBER: 60/090435

R FILING DATE: 1998-06-24

A RPPLICATION NUMBER: 60/090444

R FILING DATE: 1998-06-24

R APPLICATION NUMBER: 60/090445
 R APPLICATION NUMBER: 60/089538
R FILING DATE: 1998-06-17
R APPLICATION NUMBER: 60/085598
R PILING DATE: 1998-06-17
R APPLICATION NUMBER: 60/089599
R FILING DATE: 1998-06-17
R APPLICATION NUMBER: 60/088655
R APPLICATION NUMBER: 60/088655
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R APPLICATION NUMBER: 60/088738
R FILING DATE: 1998-06-10
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R FILING DATE: 1998-06-10
R FLING DATE: 1998-06-10
 A APPLACALANTE STATE STA
 APPLICATION NUMBER: 60/090246
FILING DATE: 1998-06-22
 APLING DATE: 1998-06-22
APPLICATION NUMBER: 60/090349
FILING DATE: 1998-06-23
APPLICATION NUMBER: 60/090355
FILING DATE: 1998-06-23
 APPLICATION NUMBER: 60/090252
FILING DATE: 1998-06-22
 APPLICATION NUMBER: 60/089600
FILING DATE: 1998-06-17
APPLICATION NUMBER: 60/089653
FILING DATE: 1998-06-17
 FILING DATE: 1998-06-22
APPLICATION NUMBER: 60/090254
 APPLICATION NUMBER: 60/090431
 FILING DATE: 1998-06-16
APPLICATION NUMBER: 60/089514
FILING DATE: 1998-06-16
PILING DATE: 1998-06-17
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FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/08826
 FILING DATE: 1998-06-10
APPLICATION NUMBER: 60/088858
FILING DATE: 1998-06-11
APPLICATION NUMBER: 60/08861
FILING DATE: 1998-06-11
 FILING DATE: 1998-06-11
APPLICATION NUMBER: 60/088876
FILING DATE: 1998-06-11
APPLICATION NUMBER: 60/089105
 FILING DATE: 1998-06-12
APPLICATION NUMBER: 60/089440
FILING DATE: 1998-06-16
APPLICATION NUMBER: 60/089512
 1998-06-24
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 R APPLICATION NUMBER: 60/088021
R FILING DATE: 1998-06-04
R APPLICATION NUMBER: 60/088025
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R APPLICATION NUMBER: 60/088026
R FILING DATE: 1998-06-04
Sequence 47, Application US/09989293A
Patent No. US20020177164A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
APPLICANT: Botstein, David
 FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088030
 FILING DATE: 1998-06-04
APPLICATION NUMBER: 60/088033
 APPLICATION NUMBER: 60/088028
 Ferrara, Napoleone
 Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
 FILING DATE: 1998-06-04
 Desnoyers, Luc
Eaton, Dan L.
 Pong, Sherman
 APPLICANT:
APPLICANT:
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APPLICANT: WOOD, WILLIAM I.

APPLICANT: WOOD, WILLIAM I.

APPLICANT: WOOD, WILLIAM I.

TITLE OF INVENTION: Accreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Accide Encoding the Same
FILE REPERENCE: P2330PLC61
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CURRENY PELLING DATE: 1997-10-16
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APPLICATION NUMBER: 60/088025
FILING DATE: 1998-06-04
 Grimaldi,J.Christopher
Gurney,Austin L.
Kljavin,Ivar J.
 Watanabe, Colin K.
Williams, P. Mickey
Wood, William I.
 Stewart, Timothy A.
Tumas, Daniel
 Ferrara, Napoleone
 Pan, James
Paoni, Nicholas F.
 Roy, Margaret Ann
 Gerritsen, Mary E.
 Gerber, Hanspeter
 Godowski, Paul J.
 Baker, Kevin P.
Botstein, David
 Napier, Mary A.
 Goddard, Audrey
 Desnoyers, Luc
 Fong, Sherman
 Eaton, Dan L
 RESULT 15
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 1998-06-24
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Gaps